A STUDY TO ASSESS THE EFFECTIVENESS OF CONCENTRATION ENHANCEMENT THERAPY IN IMPROVING CONCENTRATION AMONG SELECTED SCHOOL AGE CHILDREN IN SELECTED SCHOOL AT KANYAKUMARI DISTRICT.

A DISSERTATION SUBMITTED TO THE TAMILNADU DR.M.G.R. MEDICAL UNIVERSITY CHENNAI, IN PARTIAL FULFILMENT FOR THE DEGREE OF MASTER OF SCIENCE IN NURSING

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APRIL 2016

Bonafide Certificate

This is to certify that the dissertation entitled **"A Study to assess the Effectiveness of Concentration enhancement therapy in improving concentration among school age children in selected school at Kanyakumari District."** is a bonafide research work done by **Mrs. Sutherlin Suba.B, II year M.Sc (N),** Global College of Nursing, Nattalam under the guidance of **Mrs. Kavitha Kisho, M.Sc., (N) HOD in Child Health Nursing** in partial fulfillment of the requirements for the Degree of Master of Science in Nursing under TamilNadu, Dr. M.G.R Medical University.

Principal

Place : Nattalam
Date :

Global College of Nursing,
Nattalam

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Place : Nattalam

Date :

Mrs. Kavitha Kisho, M.Sc., (N)

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Nattalam.

Declaration

I hereby declare that the present dissertation titled **"A Study to assess the Effectiveness of Concentration enhancement therapy in improving concentration among school age children in selected school at Kanyakumari District."** the outcome of the original research undertaken and carried out by me under the guidance of **Prof. Mrs. Vijila Berlin, M.Sc. (N),** Child Health Nursing, and **Mrs. Kavitha Kisho, M.Sc, (N)** HOD, Child Health Nursing Nursing in Global College of Nursing, Nattalam. I also declare that the material of this has not formed in anyway, the basis for the award of any degree or diploma in this university or any universities.

Place: Nattalam

Date:

Mrs. Sutherlin suba

II year M.Sc (N)

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INVESTIGATOR

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ABSTRACT

INTRODUCTION

Concentration is a very important skill for a child because it provides an ability to focus and help to control momentary impulses. Concentration difficulty is a common problem among millions of children. concentration enhancement therapy helps to increase the concentration through various activity.

STATEMENT

"A study to assess the effectiveness of concentration enhancement therapy in improving concentration among school age children in selected hospitals at Kanyakumari District."

OBJECTIVES

- To assess the pretest and post test level of concentration among selected school age children in experimental group and control group.
- To determine the effectiveness of concentration enhancement therapy by comparing the post test level of concentration among experimental and control group.
- To find out the association between the pre test level of concentration among selected school age children with their selected demographic variables such as age, gender, birth order, type of family, no of siblings, educational status of father, educational status of mother, father's occupation, mother's occupation, family income per month.

RESEARCH METHODOLOGY

The research design adopted for this study was true experimental design .The sample size was 60 and was drawn through simple random sampling technique. The feasibility of the study and the refinement of the tool were assessed through pilot study. The level of concentration was assessed by using James M Swanson modified concentration assessment scale

The data collection for the main study was done from 24-9-2015 to 25-10-2015. Concentration enhancement therapy was applied for experimental group. Post test done after intervention period. The data gathered were analyzed by descriptive and inferential statistical method.

FINDINGS

The findings concluded that in the experimental group,16(53.33%) had Low level concentration, 14(46.67%) had Medium level concentration, 0(0%) had High level concentration. In Control group, 15 (50%) had Low level concentration, 15 (50%) had Medium level concentration, 0(0%) had High level concentration.

In Experimental group, 0 (0.00%) had Low level concentration, 20 (66.67%) had Medium level concentration, 10 (33.33%) had High level concentration. In Control group, 16 (53.33%) had Low level concentration, 14 (46.67%) had Medium level concentration, 0 (0.00%) had High level concentration.

It revealed that, the mean score of selected school age children in Experimental group was 13.96 in pre test and 18.80 in post test. The paired 't' value was 13.34***** which is significant at p >0.05. In Control group the mean score of selected school age children was 12.66 in pre test and 12.96 in post test. The paired 't' value was 0.902***** which is significant at p >0.05. The mean score of selected school age children in Experimental group was 18.80 in post test and 12.96 in Control group post test. The estimated' value was 5.35***** which is significant at p > 0.05. Hence it was infered that concentration enhancement therapy was effective in improving the level of Concentration

CONCLUSION

Poor concentration is a major problem in the school age children with concentration. The investigator find that concentration enhancement therapy was effective in improving concentration.

CHAPTER - I
INTRODUCTION

"Concentration is the progressive realization of a worthy goal "

- Earl Nightingale

School age period is one of the most important period of one's life. It is a period of stress and strain of day dreams of intense affection and excitement. The school age are still lacks maturity of thought and experience.

The transitional period between childhood and adulthood is characterized by physical and psychological changes. Psychological changes due to lack of love, affection, security, broken family, siblings jealousy and inappropriate school environment which affects the children psychological development due to these problems some of the school age children are not able to concentrate in their studies. (Lillian Wade- 2014)

Low concentration and attention levels are common problems among millions of children. With each passing day, more children were suffering from concentration problems, when they find it extremely difficult and tough to concentrate or focus on a particular issue for too long. Loss of concentration could pose a serious problem of the children, especially in his or her classroom. Nevertheless, nurturing concentration and focus in child is not a difficult task. Persons can help the children to develop focus and concentration, by using a number of useful activities and exercises. (Andrew loh- 2010)

India is the 2nd most populous country in the world with over 1.21 billion people (2011 census). The children age 0-15years constitutes about 31.1% (Male 190,075,426, Female 172,799,553) about 15% consist of school children. Childhood

years are significant for intellectual growth and personality development. It is the period of maximum learning and is crucial for education of the child. It is mainly the young person to live in the community should be prepared and learns good social adjustment. (Nejad-2010)

In Tamil Nadu, the total number of child population is 68, 94,821. In that35, 42,351 children are boys and 33, 52,470 children are girls. So totally 9.56Percentage of population is children, Recent data from surveys indicate that approximately 6.4 million children 4-7 years of age has the problem of poor concentration. (National census, (2011).

Getting distracted is normal for young children, but is a major problem when the child grows up and is unable to concentrate on academics and school work. Lack of concentration or an inability to focus on the task at hand is a common concern. They have a lower attention span leading to loss of interest in the activity or object quickly. So it is not easy to keep them occupied them with one or other activity. (Swathy.N- 2008)

Some students seem naturally enthusiastic about learning, but may need or expect their teacher to inspire, challenge and stimulate them. The factors affecting students concentration during the class depends on the interest in the subject matter, the types of classroom activities involved, desire to achieve self-confidence and self-esteem as well as mood and determination. (Bligh and Sass -2010)

NEED FOR THE STUDY

Concentration is fixing the mind on an external object or an internal point. Concentration is the only way to get rid of worldly miseries and tribulations. School age children can get the penetrative insight. School age children can do any work with

greater efficiency. Concentration purifies and calms the surging emotions, strengthening the current thought and clarifies the ideas. (Wikipedia)

The global prevalence of Lack of concentration have been estimated from 500 million to 2.3 billion. Around 15.3 million over 6-12 years of age are having lack of concentration, as a result of uncorrected of whom 8 million are drop out. Worldwide estimation of prevalence of concentration in 2011, is 1.4 million. In India, it is estimated that 5.1% of children in schools had a lack of concentration. WHO estimated about 119 million children are having lack of concentration, among these 12 million children are having lack of concentration due to family problems.(WHO-2011)

The prevalence of poor concentration among primary school age children was found to be 11.3% and higher among males66.7% as compared to that of females 33.3% (Jyothsnaakamvenkam 2013)

Some children have lack of concentration in performing a task, inability to stay on task, failure to complete task and shift from one uncompleted task to another. Several studies have manifested that approximately 3.7% of school age (6-12 years) children have attention deficit disorders- USA-4.8%, Korea-7.6 to 9.5%, India- 10-20%, UAE 29.7% respectively. Recent studies have shown that approximately half to one third of children with lack of concentration continue in adulthood. (Wikipedia)

Concentration enhancement therapy builds and enhances or restores natural neural pathways in the body and brain, to assist natural learning. Physical activityfor15 minutes will improve concentration, memory and classroom behavior among elementary school students. Concentration enhancement therapy is a learning enhancement system that draws out normally unavailable brain potential through simple movement based activities. Learning difficulties are experienced when there

are only limited areas of brain activation available to a student. Concentration enhancement therapy stimulates the whole brain for effective functions, and enables uninterrupted **Brain-Body communication**. This results in effortless learning and higher levels of performance.(Stewart Ross- 2010)

Lack of Concentration is prevalent among 10-20% of the children in the age group of 4-12 years in the world. The prevalence of lack of concentration in Western Australia was 13.2%of the children had Lack of Concentration out of which 36.5% had significant problems.(Austin.l-2011)

Concentration enhancement therapy consists of simple movements for coordination of eyes, ears, hands and the whole body. The ultimate goal of Concentration enhancement therapy is to create a fully functioning mind/body system, called as an "integrated" state. It is different from other learning supportive programmes in which it prepares learners to learn. (Joshlin pauline- 2009)

The researcher realized that the neighbour children are not doing their home work and there is many mistakes in class note and concluded the children having poor concentration,This is inculcated the researcher to select the study and introduce the concentration enhancement therapy to improve their concentration on school performance.

STATEMENT OF THE PROBLEM

A study to assess the effectiveness of concentration enhancement therapy in improving concentration among school age children in selected schools at Kanyakumari district**.**

OBJECTIVES

- To assess the pretest and post test level of concentration among selected school age children in experimental group and control group.
- To determine the effectiveness of concentration enhancement therapy by comparing the post test level of concentration among experimental and control group.
- To find out the association between the pre test level of concentration among selected school age children with their selected demographic variables such as age, gender, birth order, type of family, no of siblings, educational status of father, educational status of mother, father's occupation, mother's occupation, family income per month.

HYPOTHESES

- H1: There will be a significant difference between the pre test and post test level of concentration among selected school age children in experimental and control group.
- H2: There will be a significant difference between the post test level of concentration among selected school age children in experimental and control group.
- H3: There will be a significant association between the pre test level of concentration among selected school age children with their selected demographic variables such as age, gender, birth order, type of family, no of siblings, educational status of father, educational status of mother, father occupation, mother occupation, family income.

OPERATIONAL DEFINITIONS

Effectiveness

The ability to produce specific result or exert a specific measurable influence.

In this study effectiveness refers to determine the positive desired outcome of concentration enhancement therapy among selected school children which is measured by James M Swanson modified concentration assessment scale.

Concentration enhancement therapy

Concentration enhancement therapy is a active exercise or process of concentrating, especially the fixing of close, undivided attention.

In this study concentration enhancement therapy refers to a series of activities use to activate the brain function and to improve the concentration. It includes physical exercises, letter cancellation test, and colour cancellation test. It was administered for 20minutes once a day for 5 days per week about 4 weeks.

Improving Concentration

The ability to give your attention or thought to a single object or activity.

In this study improving concentration refers to enhancement in concentration among selected school age children like class room performance as a result concentration.

School age children

Children's between the age group of 6 and 12 years is called school age children.

In this study school age children refers to both boys and girls between the age group of 7and 9 years.

ASSUMPTIONS

- ✓ Most of the school age children may have low concentration.
- ✓ Low Concentration may leads to psychological and cognitive disturbance among school age children.
- ✓ Level of concentration may vary from individual to individual.
- ✓ Continuous performance of concentration enhancement therapy may enhance the concentration level.

DELIMITATIONS OF THE STUDY

This study was delimited to

- ❖ a period of 4 weeks.
- ❖ Children between the age of 7 to 9 years.
- ❖ Medium of instruction is tamil.
- ❖ Children who are attending the class during time of data collection

Ethical consideration

A formal consent was obtained from the principal of global college of nursing and than consent was obtained from the Head master of selected schools, after getting permission from school authority, oral consent was obtained from class teacher.

CONCEPTUAL FRAME WORK

Conceptual framework is a whole of interrelated concepts or abstracts that are assembled together in some rational scheme by virtue of their relevance to common theme. A conceptual model provides for logical thinking for systemic observation and interpretation of observed data. The model also gives direction for relevant

questions on phenomena and points out solutions to practical problems as well as serves as a spring board for the generation of hypothesis to be used.

Shirly 1975 states," the conceptual frame work formalizes the thinking process. So that others may read and know the frame of reference basis to research problem."

The conceptual framework which suits the present study is based on **General System Theory of Von Ludwig Bertalanffy (1968) as explained by Newby (1996).**

According to Von Ludwig Bertanlanffy, a system is composed of a set of interactive elements and gets each system distinct from environment in which it exits. In all systems activities can be resolved into an aggregation of feedback circuits such as input, throughput and output. The feedback circuits helps in maintenance of an intact system.

Present study aims at evaluating the effectiveness of concentration enchancement therapy among selected school age children. Conceptual framework of this study is based on the system model. The model consists of three phases

1. Input

It is the energy transformed by the system. It refers to the target groups with their character such as age, gender,birth order,type of family, no of siblings,educational status of father,educational status of mother,father occupation,mother occupation,family income per month and the assessment of pre-test level of concentration in experimental group and control group

2. Through put

It is a process that occurs at some point between the input and output process, which enables the input to be transferred as output in such a way that it can be readily used by the system.

According to Von Ludwig Bertanlanffy throughput is defined as the process by which the system processes output and release output.

In this study the throughput refers to concentration enhancement therapy among selected school age children in experimental group.

3. Output

According to the system theory, output refers to the energy, matter, or information that leaves the system. In the present study, output is considered as the evaluation of concentration enchancement therapy among selected school age children. It will be received in the form of post test level of concentration in experimental group and control group through James M Swanson modified concentration assessment scale

4. Feedback

According to this system theory feedback refers to the output that is returned to the system and it allows it to monitor itself overtime to a steady state known as equilibrium or homeostasis.

For the present study feedback was related to evaluate the effectiveness of concentration enhancement therapy among selected school age children will be obtained by testing of hypotheses-Relationship between pre test and post test level of concentration among selected school age children through James M Swanson modified concentration assessment scale and Association between pre test levels of concentration f among selected school age children with the selected demographic variables such as age, gender, birth order, type of family, no of siblings, educational status of father, educational status of mother, father occupation, mother occupation, family income per month.

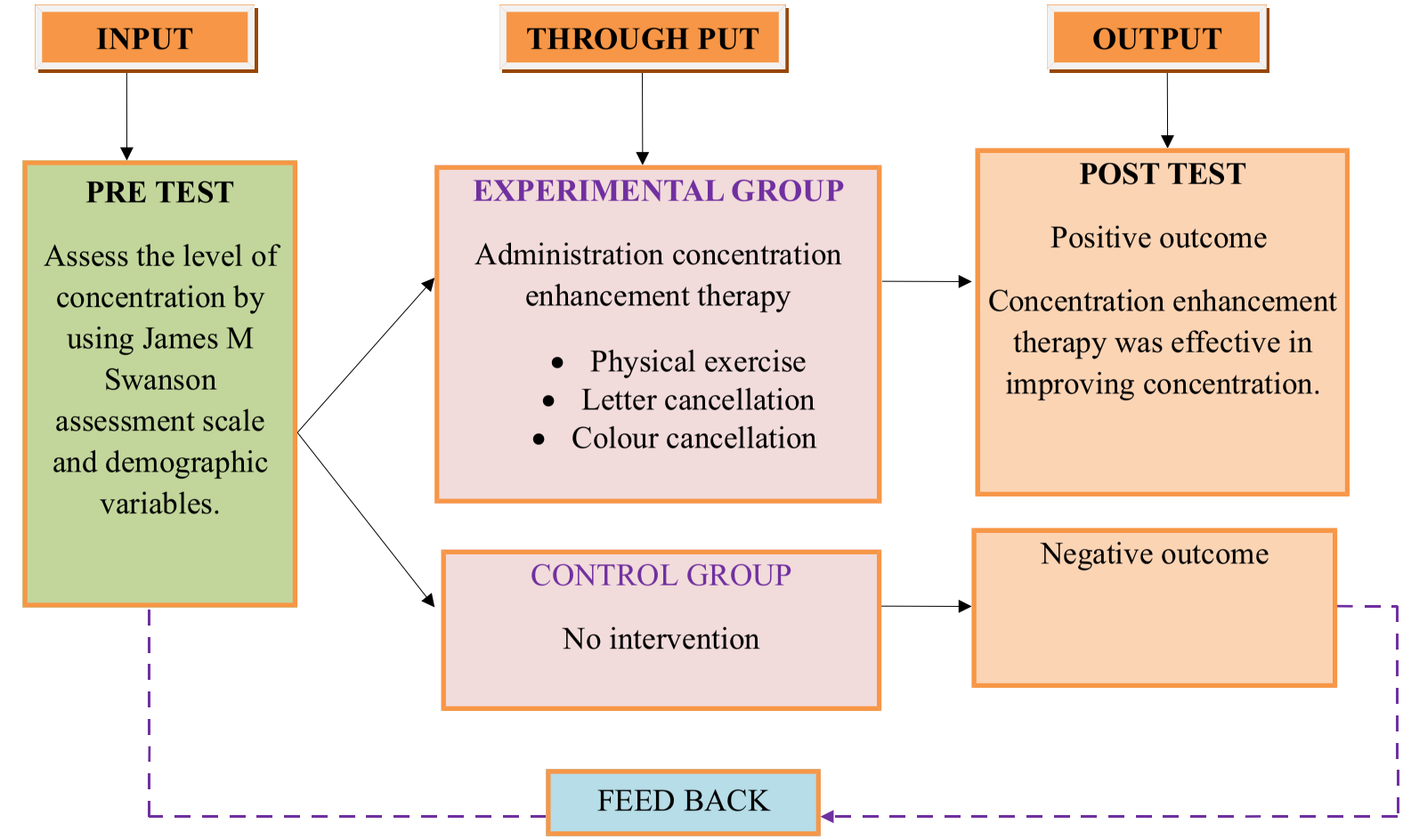


***Figure 1:*Conceptual framework based on launching Von Ludwig Bertanlanffy (1965) and Kenny generalSystem Theory**

CHAPTER II

REVIEW OF LITERATURE

Review of literature is a vital component of the research process. It gives new researcher, orientation for the conduction of the study. It provides the source of research ideas for the new researcher. Review of literature is defined as a critical summary of review on a topic of interest, often prepared to put a research problem in contest **(Polit & Beck, 2006)**

The review of literature in the research report is a summary of current knowledge about a particular practice problem and includes what is known and not known about the problem. The literature is reviewed to summarize knowledge for use in practice or to provide a basis for conducting a study **(Burns, 1997)**.

It is organized under the following sections;

Section-A: Studies related to Prevalence of lack of concentration.

Section-B: Studies related to Effectiveness of concentration enhancement therapy on Improving concentration.

SECTION-A: STUDIES RELATED TO PREVALENCE OF LACK OF CONCENTRATION

Dennies. M. Brava(2014) investigated a study in(UK) United kingdom on prevalence of lack of concentration among a sample of school age children and evaluate a new system for concentration screening in schools in UK. Information about the child's symptoms, history and family history was acquired by means of a parental questionnaire and entered into the program prior to the concentration screening. The study results showed that lack of concentration screening with the

outcome gave a behavioural problems of 93.8% and lack of concentration in studies of 96.1%.The study concluded that significant number of young school age children have unsuspected remediable lack of concentration and behavioral problems.

Chinguhungsan.S.H (2013) evaluated the distribution pattern of concentration and prevalence of concentration among school-age children in Western China. A random sampling strategy in geographically defined clusters was used to identify children aged 6-15 years in Yangchuan. The study results showed that a total of 3469 children living in 2552 households were selected, and 3070 were examined. The prevalence of lack of concentration were 3.26%, 13.75%, and 3.75%, respectively. The study concluded that lack of concentration status changes gradually as age increases.

Nakhonpathom(2013) assessed the prevalence of the lack of concentration in primary school-aged children in Bangkok. Random selection of geographically defined clusters was used to identify the study sample. The study results showed that among 2340 children, 1100 in Bangkok 1240 were examined. The prevalence of lack of concentration in Bangkok and were 12.7% and 5.7% respectively. The cause of lack of concentration due to parents and environment 97.6%, siblings is 0.5%, other causes is 0.8% and unexplained causes is 1.1%. The study concluded that there was high prevalence of lack of concentration in school age children.

Donna Mashalshan (2012) conducted an explorative study to assess the lack of concentration and behavioral problems in Singaporean children based on parent teacher and child reports. A community sample of 2139 children between the age group of 6-12 years was selected. Child concentration and behavior check List (CBCL), Teacher Rating Form (TRF) and child report questionnaires for lack of

concentration and anxiety were administered. The study concluded by stating that Higher prevalence of lack of concentration and behavioural problems was identified.

Abdulaharawn(2012) case control study were conducted to determine the prevalence of concentration and behavioral problems among male Saudi school children and identifying their risk factors. One thousand three hundred and thirteen male school children of Al-Abanae school were included. Study was conducted in two phases: a cross-sectional approach (screening phase) to assess their concentration and behavioural problems and a case control phase to study risk factors. Among the 1313 participants, 109 (8.3%) were psychologically disturbed students (according to cut-off score for boys estimated at the 90^{th} percentiles). Among the studied socio-demographic variables, educational level (intermediate versus primary), and the mother's occupation (working versus non-working) were associated with a higher risk of developing lack of concentration and behavioural disturbance. The study concluded that lack of concentration and behavioural problems in children are associated with education and occupation of mothers

Beevee benazir (2012)had conducted a study on Assessment of lack of concentration and behavioral problems among 1488 primary school children in Karachi, Pakistan aged 5 to 11 years children's mental health was assessed using Strength and Difficulties Questionnaire (SDQ). The result show that 34.4% parents rated children as falling under the "abnormal category" on SDQ, 35.8% were reported by the teacher. The study concluded that there was gender difference in prevalence. Boys had higher estimates of lack of concentration whereas emotional problems were more common amongst females. The study concluded by saying that the prevalence of concentration was more in employed parents and also there was gender difference (more common in boys than girls).

Kusanth Agarwal (2011) investigated the prevalence among school children in Himachal and North India. The study results showed that prevalence of lack of concentration was 31.6%, socio economic status22%, single parent 2.5%, siblings 2.3%, anxiety 1.8 %,others 0.8%. The study concluded that a high prevalence of lack of concentration among primary school age children was observed.

Ajmal. k. Nowfal (2011) had done a descriptive analytical study to assess the concentration level of children of working mothers at Mangalore. Purposive sampling technique was used to select 150 samples from two schools. Data were collected using concentration rating scale and emotional rating scale. The study concluded that mothers' parenting style had a great impact on concentration level.

Tanya. k. Joseph (2010) investigated the relationship between concentration and GPA (grade point average) through concentration in school age students at Kochin. The sample was 400 students (200 male and 200 female) in the age range of 8-12 years. The instrument used for data collection was the Ravens assessment scale (RAS). An analysis of the data obtained from the current study showed that, for the respondents concentration had a significant impact on grade point average (GPA) through memory ($z=1.93$, $p\leq 0.02$). The results of the study recommended that academic achievement and mental health be developed in school settings through the use of support strategies such as educational guidance and concentration enhancement therapy and teaching life skill programs.

Joyce Annabelle (2009) evaluated the prevalence of lack of concentration in southern India. The study results showed that lack of concentration was the main cause of less academic achievement in children aged between 7 and 15 years in rural India that was 61%. Lack of concentration was present in 4.1% of the children. Moderate level of concentration was present in 0.8% of children. In urban areas of

India the prevalence of lack of concentration among school children 5 to 15 years of age was found to be 6.4%.Lack of concentration was the main cause in 81.7% of children in academic performance. Also it was found in the same study that moderate level of concentration was present in 7.7% and mild concentration in 7.4%. The study concluded that study was associated with both gender.

Nancy dhas (2008) had conducted a comparative study to assess the level of concentration among primary school children of Salem, Tamil Nadu age group 6-12 years of employed and unemployed mothers. One hundred samples were selected through non-probability convenience sampling technique – 50 employed mothers and 50 unemployed mothers of primary school children. The result revealed that among the primary school children of employed mothers, 33 (66%) had below average academic performance and 17 (34%) had mild average in academic performance, and none had poor academic performance , whereas among the primary school children of unemployed mothers majority (78%) had mild academic performance , 11 (22%) had moderate academic performance , and none had severe academic performance. The study concluded that the lack of concentration in primary school children are higher among employed mothers than in unemployed mothers.

SECTION-B:STUDIES RELATED TO EFFECTIVENESS OF CONCENTRATION ENHANCEMENT THERAPY ON IMPROVING CONCENTRATION

Lena. L. Limand Ee- HeokKua (2011) had conducted an literature experimental study in Oregon state to determine the effects of physical and mental wellbeing on regular physical activity like exercise, letter cancellation, colour cancellation linked to improved concentration, and learning abilities. Sample size was

50 and duration was 10 days. Random sampling technique was adopted. Result showed that 15 minutes of physical activity had improved concentration, memory and classroom behavior among elementary school students. The researcher concluded 80% improved concentration and academic performance. The results were more pronounced among children.

Bonzia (2010) had conducted a study to examine the ability of 60 elementary school students with concentration problems. Ranging in age from seven to eleven years, the students were matched according to age and gender and assigned equally for Concentration enhancement therapy' intervention and one control group. The first treatment group was called the physical activity-only group. This group performed concentration enhancement therapy for twenty minutes twice a day. The treatment was continued five days a week for six weeks. The study concluded that concentration enhancement therapy was very effective in improving concentration.

Jongenelis K. et.al (2010) had conducted a randomized study at University of London to assess the effectiveness of concentration enhancement therapy to improve concentration among children with the sample size of 114.State concentration was assessed before and after the therapy education program using the "Ravens concentration assessment scale". The target control groups were (1) a physical education group to control the effects of breathing (2) a group controls the aesthetic sensitivity training, and (3) a mathematics group, Several concomitant variables were measured; age, sex, attitude towards academic performance and previous academic performance in the class room. The result shows that concentration enhancement therapy significantly reduced anxiety and helps in developing concentration, whereas control group activities were not been obtained such as alike of experimental group.

Huuhka K. and Leinonen E (2010) had conducted a longitudinal study in California to assess the concentration of primary school students. For 25 of them were experimental group, 25 of them were control group. Concentration enhancement therapy showed an increase of 33.22 points on the means of student posttest scores when compared to their means scores on the pretest, the control group showed an increase of 28.25 points, indicating that the use of Concentration enhancement therapy improved student achievement when long-term memory was involved however, when comparing the means of both groups' performance on chapter tests, the treatment group outscored the control group by 8 points. The difference was not significant, but noteworthy, possibly indicating that the use of Concentration enhancement therapy improved concentration of student achievement when short-term memory was involved, but not long-term memory.

Jane Irving (2010) had conducted an experimental study among 27 school students using three separate groups as controls during the different phases of the nine week study. The study measured the effects of concentration therapies, making up a twenty minutes sequence known as the PACT (Physical activity and Cancellation task) process, on weekly assessment of concentration and performance on 14 technical- motor skill – test. The PACT group experienced a 69.5% of increasing concentration and 18.7 % increase in performance on skill tests, as compared to continued concentration level and higher failure rate in the control group not using PACT.

Matranbinha (2009) evaluated the effectiveness of concentration enhancement therapy on intelligent quotient, concentration in normal school children was done in Birdhum district, West Bengal. It was a stratified random controlled study among 153 students aged 6-12 years selected randomly into three groups. Each

set of practices was designed to study its effect on variables like Intelligent quotient, creativity and physical stamina ,concentration .Concentration enhancement therapy include physical activities and cancellation task. Intelligent quotient level of each group was measured using 'draw a man test.' The result showed that there was a significant change in the concentration level at 8.52%. Hence the researcher concluded that this specific concentration enhancement therapy can be incorporated into regular school curriculum for better academic performance.

Giju Thomas (2009) had conducted a study to assess the effectiveness of concentration ability in school children by intensive practice of integrated approach of concentration enhancement therapy through cancellation test at Selam, Tamilnadu. Normal healthy 276 Tamil medium school children aged 6-12 years (14.25+1.09) were randomly assigned into three groups. Cancellation (color, letter & character) test was administered to children in all three groups on the first and ninth day of the residential programme. Comparison of pre and post values showed that there was significant improvement in cancellation test for all three groups intelligent quotient was (12.53%),color cancellation group was (10.10%) & Physical stamina group was (11.98%) letter cancellation Intelligent quotient group was (10.10%) creativity group was (11.98%)physical stamina was 13.29% .The study concluded that the three integrated therapy were effective in improving concentration.

Dorothy H. L (2008) had conducted a longitudinal study to assess the effectiveness of concentration enhancement therapy activities on reading achievement, attention, and concentration among 60 selected students using standardized Rovens 9 test. The study compared the children's reading percentage scores from May 2007 (the end of the previous school year), to those of May 2008 (the end of the "Concentration therapy" school year). They also compared the scores

of students from control classes with the scores of students from "Concentration therapy" classes. The results showed that 80% of students scored more than 30% increase in reading achievement, attention and their concentration level after Concentration enhancement therapy.

Leslie B. Ranew (2008) utilized concentration enhancement therapy on student achievement, concentration and participation in a primary school U.S. The two classes of 50 students participating in the 8-week study were taught with the same lesson plans and materials. The Concentration enhancement therapy group did 30 minutes of specific activities to begin each class, but students in the control group did not. Post test was conducted with the use of concentration enhancement therapy attitude survey. Results showed mean score is 34.25. There was no significant difference in student achievement or participation, however an Attitudes Survey indicated that students using concentration enhancement therapy believed that use of the activities increased participation in lessons and helped them to concentrate on the classes.

CHAPTER III

RESEARCH METHODOLOGY

The methodology of this study includes the research approach and research design setting of the study, description of population, sample, sample size, sampling Technique, developing and testing of the tool, method of data collection and plan for data analysis.

RESEARCH APPROACH

Polit and Hungler, (2004) defined the research approach as "a general set of orderly discipline procedure used to acquire information".

To accomplish the objectives of this study, A quantitative approach was used to determine the effectiveness of concentration enhancement therapy in improving concentration among selected school age children.

RESEARCH DESIGN

Polit and Hungler, (2004) defined research design as "overall plan for addressing a research questions, including specification for enhancing the study integrity.

True experimental pre test and post test control research design was used for the present study.

Group	Pre test	Intervention	Post test
Experimental group	RE1	X	RE2
Control group	RC1	-	RC2

Tab: 3.1 Representation of research design

Key:

R - Randomization.

E1 – Pre test of experimental group

C2- Pre test of control group

X -Concentration enhancement therapy.

E3- Post test of experimental group.

C4 - Post test of control group.

SETTING OF THE STUDY

Polit and Hungler, (2001) stated that the physical location and condition in which data collection takes place in a study is the setting of the study.

The study was conducted in St. Bernadette's high school Mangalakuntu in kanyakumari dist. It is about 8 km away from Global College of nursing, Nattalam. The selection of school was done on the basis of feasibility of conducting the study and availability of samples and it accessibility to the investigator.

VARIABLES

Polit and Hungler, (2004) defined an attribute of a person or object that varies, that is, takes on different values.

Dependent Variable

Polit and Hungler (2004) defined dependant variables as "The variable hypothesized to depend on or be caused by another variable (the independent variable) the outcome variable of interest".

The present study dependent variable was level of concentration.

Independent Variable

Polit and Hungler (2004) defined independent variables as "The variable that is believed to cause or influence the dependent variable; in experimental research, the manipulated (treatment) variable".

The present study independent improving concentration enchancement therapy.

Extraneous Variables

Polit and Hungler (2004) defined extraneous variables as "A variable that confounds the relationship between the independent and dependent variables and that needs to be controlled either in the research design or through statistical procedures".

The present study extraneous variables were age, gender, birth order, type of family, no of siblings, educational status of father, educational status of mother, fathers occupation, mother occupation, family income per month.

POPULATION

According to Polit and Hungler, (2005) “A population is the entire aggregation of cases in which a researcher is interested”.

The population of the study was comprised of selected school age children between the age group of 7 and 9 years and those who are studying in the selected school at kanyakumari.

SAMPLE SIZE

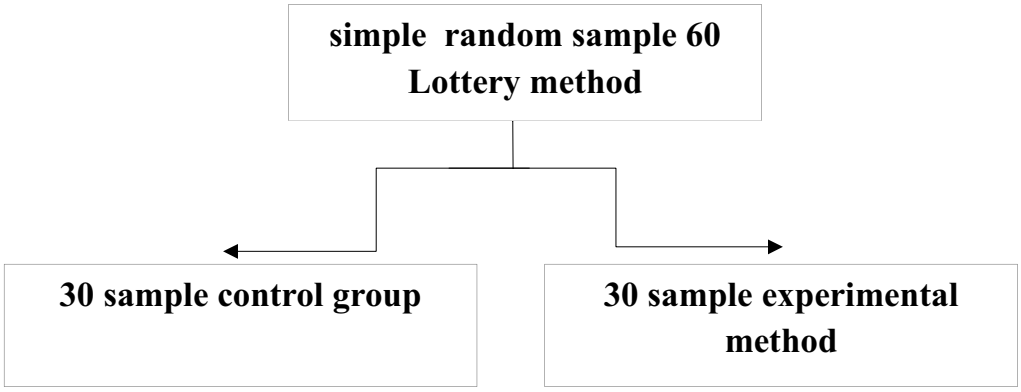
Sample size is the total number of study participants participating in a study (polit 2008).

The sample size was 60 school age children between the age group of 7 and 9 years studying in selected school.

SAMPLING TECHNIQUES

Simple random sampling technique was adopted for the study.

A simple random sampling technique used to select 60 samples, and then the samples were divided into control group and experimental group by lottery method.



SAMPLING CRITERIA

The sample was selected on the following criteria

Inclusion criteria

- the children who were
- within the age group of 7 and 9years
- willing to participate.
- studying tamil medium.

Exclusion Criteria

- The children who were
- mentally challenged.
- with any systemic illness.
- not willing to participate in the study.

DESCRIPTION OF TOOL

Treece and Treece, (1986) emphasized that the instrument hospitalized in research should as far as possible be the vehicle that could best obtain data for drawing conclusion, pertinent to the study.

The effectiveness of concentration enchancement therapy in improving concentration among selected school age children was assessed by the James M Swanson modified concentration assessment scale.

Part I

This section deals with the demographic variables consists of hospitalized subject such as their Age, gender, birth order, type of family, no of sibling, educational status of father, education status of mother, father's occupation, mother's occupation, family income per month

Part II

The Modified James M swan son concentration assessment Scale consists of 10 items. The parameters included Makes careless mistakes, Blames other for his/her mistakes, Doesn't listen Fails to finish work, Disorganized, Sleeps during class hours, Loses things, Distractible, Forgetful in daily activities, Jump from one work to another work without completing.

SCORING PROCEDURE FOR LEVEL OF CONCENTRATION

- low concentration- less than 13
- medium concentration 14-22
- high concentration more than 23
- The total score was 0-30

SCORING

0- not at all

1- just a little

2- quite a bit

3- very much

CONTENT VALIDITY

According to Denise F. Content validity defined as "The degree to which the items in an instrument adequately represent the universe of content for the concept being measured".

Content validity of the tool was established by 7 nursing experts including five nursing expert two consultant. The experts were requested to give their opinion and suggestion for further modification of items to improve the clarity and content of the

items. The final tool was prepared as per the suggestions and advices given by the experts.

PILOT STUDY

According to the denise F. is defined as small scale version are trail run done in preparation of major study.

The pilot study was conducted by a formal consent was obtained from the principal of global college of nursing and then consent was obtained from the Head master of selected schools, after getting permission from school authority, oral consent was obtained from class teacher.of St. Aloysius higher secondary school velliyavilai, by explaining objectives and data collection procedure. Six students were selected in that three sample for control group and three sample for experimental group for pilot study. First day pre test was assessed the level of concentration for control and experimental group by James M swan son modified concentration assessment scale, next four days intervention was given for experimental group, again fifth day post test was conducted to the control and experimental group By James M Swanson modified concentration assessment scale. The analysis of the data was done in mean, standard deviation, and paired 't test.

RELIABILITY

Reliability is the degree of consistency or dependability with which aninstrument measures the attribute it is decided to measure. (Polit and Hungler,1999)

Reliability of the tool is established by test-retest method by using Karl Pearson's correlation coefficient. The reliability score was r=0.88 which showed a highly positive correlation of the tool. The reliability of the tool obtained is found to be feasible to conduct the main study.

DATA COLLECTION PROCEDURE

Before conducting the study, a formal consent was obtained from the Principal of global college of nursing and Head master of selected schools. After getting permission from school authority, oral consent was obtained from class teacher, by explaining objectives and data collection procedure for conducting the study in St. Bernadette's higher secondary school mangalakuntu the data collection was done for one month from 24-9-2015 to 25-10-2015.On first week pre test was conducted for experimental and control group. Second week third week intervention was given for experimental group again fourth week post test was conducted.

PLAN FOR DATA ANALYSIS

Both descriptive and inferential statistics were used to analyze the data.

Descriptive statistics

Frequency and percentage distribution were used to analyze the demographic variables.

Frequency and percentage distribution were used to assess the pre and post test level of concentration among experimental and control group of selected school age

and standard deviation were used to assess the pre and post test level of concentration among experimental and control group of selected school age children.

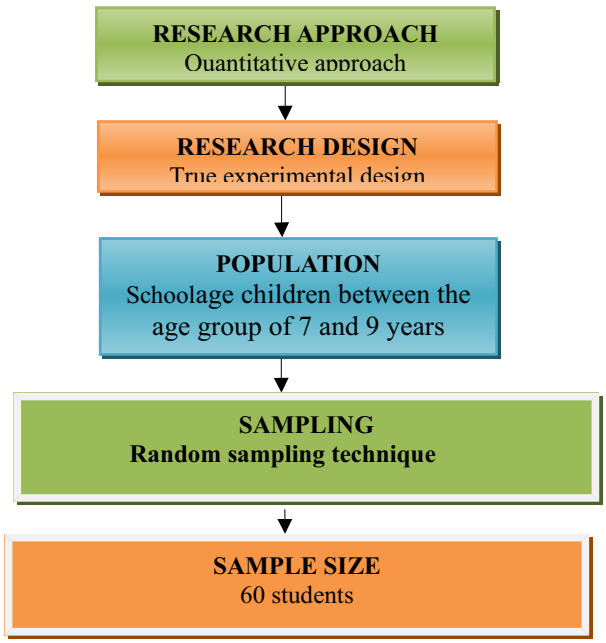
Inferential statistics

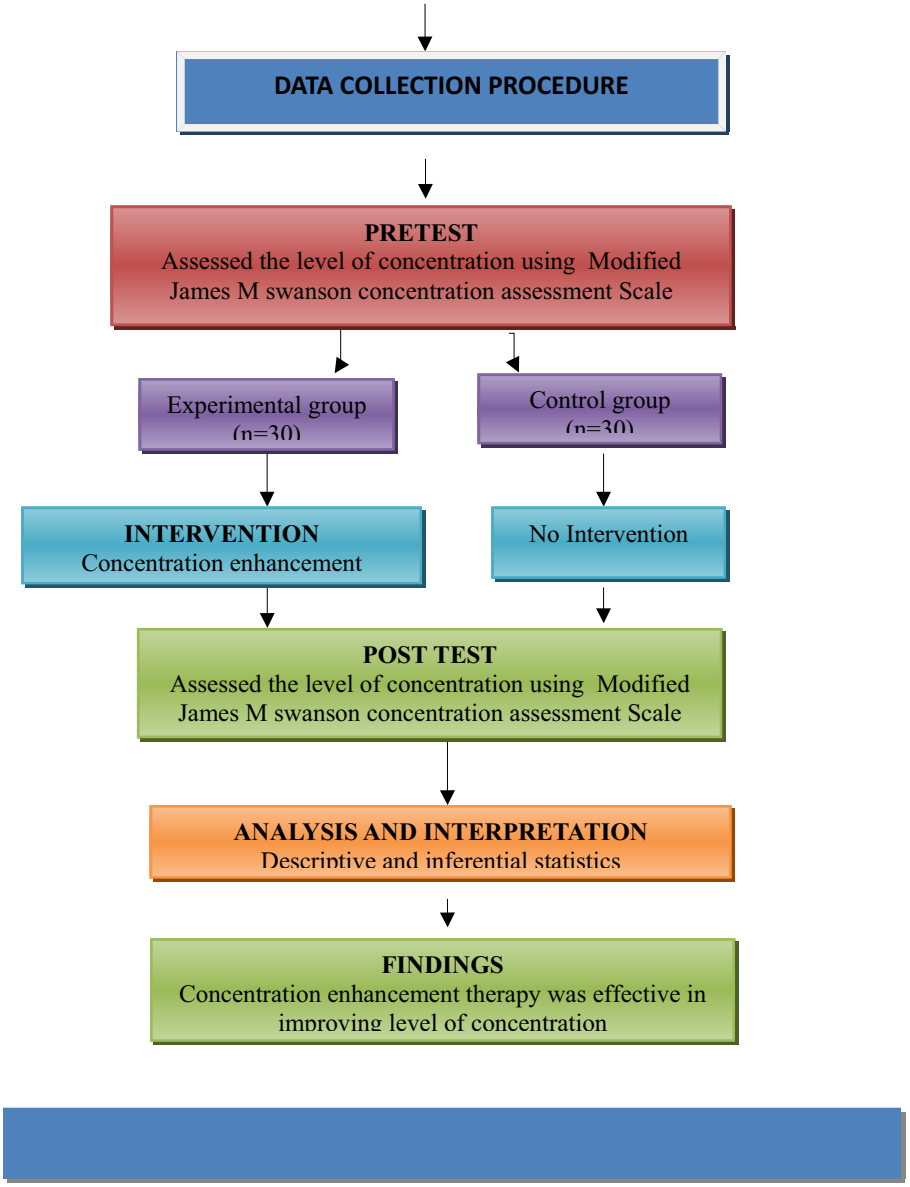
Paired 't' test was used to compare the pre-test and post test level of concentration of experimental group and control group.

Chi-square test was used to find out the association of the pre-test level of concentration among selected school age children in the with their selected demographic variables experimental group and control group.

Protection of human rights

The proposed study was conducted after the approval of the dissertation committee of Global college of Nursing. Permission was obtained fromst. Bernadette's higher secondary school mangalakuntu. Written consent was obtained from each subject before starting the data collection. Assurance was given to the study subjects regarding the confidentiality of the data collected.





CHAPTER IV

DATA ANALYSIS AND INTERPRETATION

According to Polit and Hungler (2005) analysis is the method of organizing, sorting and scrutinizing data in such a way that research question can be answered.

Research data must be processed and analyzed in an orderly fashion so that patterns and relationship can be discerned and validated, and hypotheses can be

tested. Quantitative data analyzed through statistical analysis includes simple procedures as well as complex and sophisticated methods.

This chapter deal with the analysis and interpretation of the data collected from selected school age children. The interpretation of tabulated data can bring to light the real meaning of findings of the study. In order to find meaningful answers to the research pquestions the collected data must be processed and analyzed in some orderly coherent fashion, so that patterns and relationships can be discerned. In this study the data was analyzed based on the objectives and hypotheses of the study using descriptive and inferential statistics.

The study findings are presented in sections as follows:

Section-A: I. Frequency and Percentage Distribution of the sample according to the demographic variables in Experimental group and Control group.

Section-B: I. Assessment of level of concentration in Experimental group and Control group of selected school age children before intervention.

II. Assessment of level of concentration in Experimental group and Control group of selected school age after intervention.

Section-C: I. Comparision of pre test and post test level of selected school age children in Experimental group and Control group.

II. Comparision of post test level of selected school age children in Experimental group and Control group.

Section-D: I. Association between the pre test level of selected school age children in Experimental group and control group with their demographic variables.

SECTION: A

DISTRIBUTION OF THE SAMPLE ACCORDING TO THE DEMOGRAPHIC VARIABLES IN EXPERIMENTAL GROUP AND CONTROL GROUP

Table.1: Frequency and percentage distribution of demographic variables of selected school age children with respect to age, gender, birth order, no. of sibling, Type of family, Educational status of father, educational status of mother, father's occupation, mother's occupation, family income per month in Experimental group and Control group.

(N = 60)

Sl.No	Demographic variables	Experimental group n=30		Control Group n=30	
		F	%	f	%
1.	**Age**				
	a. 7yrs	6	20.00	5	16.67
	b. 8yrs c. 9yrs	10	33.33	11	36.66
		14	46.67	14	46.67
2.	**Gender**				
	a. Male	13	43.33	14	46.67
	b. Female	17	56.67	16	53.33
3	**Birth order**				
	a. First	16	53.33	17	56.67
	b. Second c. Third	10	33.33	10	33.33
			13.34	3	10.00
5	**Type of family**				
	a. Joint	12	40.00	11	36.67
	b. Nuclear	18	60.00	19	63.33

Sl.No	Demographic variables	Experimental group n=30		Control Group n=30	
		F	%	F	%
6	**Educational status of father**	2	6.66	3	10.00
	a. Primary school	4	13.34	4	13.33
	b. Secondary school c. High school	18	60.00	16	50.33
	d. Graduate	6	20.00	7	23.34
7	**Educational status of mother**	0	0.00	0	0.00
	a. Primary school	4	13.34	5	16.67
	b. Secondary school **c.** High school	16	53.33	17	56.67
	d. graduate	10	33.33	8	26.66

8.	**Father's occupation**				
	a.cooli	7	23.33	8	26.67
	b.self employee	8	26.67	7	23.33
	C. government employee	5	16.67	5	16.67
	d. private employee	10	33.33	10	33.33
9	**mother's occupation**				
	a.house wife	13	43.33	12	40.00
	b.self employee	4	13.33	6	20.00
	C. government employee	3	10.00	4	13.33
	d. private employee	10	33.34	8	26.67
10	**Family income per month**				
	a. below Rs 5,000	0	0.00	0	0.00
	b.Rs 5,000-10,000	18	60.00	16	53.33
	c.Rs 10000-15000	9	30.00	12	40.00
	d.Rs 15000&above	3	10.00	2	6.67

Table 4.1 shows the distribution of sample according to the age in Experimental group, out of 30 sample6(20%) were 7years of age, 10(33.3%) of them were 8years of age, 14(46.67%) were 9 years of age , and in control group 5(16.67%) were 7years of age, 11(36.66%) of them were to 8years of age, 14(46.67) were 9 years.

Dispersion of sample according to the gender in the experimental group out of 30 sample 13(43.33%) were male, 17(56.67%) were female, and in control group14(46.67%) were male, 16(33.33%) were female.

With regard to birth order in the experimental group out of 30 sample16 (55.33%) belonged to first child, 10(33.33%) of them belonged to second child,

4(13.34%) belonged to third child and in Control group17(56.67%) belonged to first child, 10(33.33%) of them belonged to second child, 3(10%) belonged to third child.

With the regard to number of sibling in the experimental group out of 30 sample 12 (40%) were none, 14 (46.67%) were one children, 4(13.34%) were two children, 0 (0%) were three children and above, and in control group 13 (43.33%) were none, 15 (50%) were one children 2 (6.67%) were three children and above.

With the respect to type of family in the experimental group out of 30 sample 12 (40%) were joint family, 18 (60%) were nuclear family, and in control group 11 (36.67%) were joint family, 19 (63.33%) were nuclear family.

Scattering of sample according to the educational status of father in the experimental group out of 30 sample 2 (6.66%) belonged to Primary school, 4 (13.34%) belonged to Middle school, 18 (60%) belonged to High school and 6(20%) belonged to graduate and in Control group 3(10%) belonged to Primary school, 4(13.33%)belonged to Middle school, 16(53.33%) belonged to High school and 7(23.34%)belonged to graduate.

Scattering of sample according to the educational status of mother in the experimental group, out of 30 sample 0(0%) belonged to Primary school, 4(13.34%) belonged to Middle school, 16(53,33%) belonged to High school and 10(33.33%) belonged to graduate and in Control group 0(0%) belonged to Primary school, 5(16.67%) belonged to Middle school,17(56,67%) belonged to High school and 8(26,66%) of them belonged to graduate.

With the respect to Father's Occupation in the experimental group out of 30 sample 7 (23,33%) were Cooli, 8 (26,67%) were Self employee, 5(16.67%) were Government employee, 10 (33.33%) were Private employee and in control group 8

(26.67%) were Cooli, 7 (23.33%) were Self employee, 5 (16.67%) were Government employee, 10 (33.33%) were Private employee.

With the respect to Mother's Occupation in the experimental group out of 30 sample 13 (43,33%) were House wife, 4 (13.33%) were Self employee, 3(10.00%) were Government employee, 10 (33.34%) were Private employee and in control group 12 (40.00%) were House wife, 6 (20.00%) were Self employee, 4 (13.33%) were Government employee, 8 (26.67%) were Private employee.

With the respect to Family income per month in the experimental group out of 30 sample 0 (0.00%) were Below Rs 5,000, 18 (60.00%) were Rs 5,000 – 10,000, 9 (30.00%) were Rs 10,000 – 15,000, 3 (10.00%) were Rs 15,000 & above and in control group 0 (0.00%) were Below Rs 5,000, 16 (53.33%) were Rs 5,000 – 10,000, 12 (40.00%) were Rs 10,000 -15,000, 2 (6.67%) were Rs 15,000 & above.

AGE

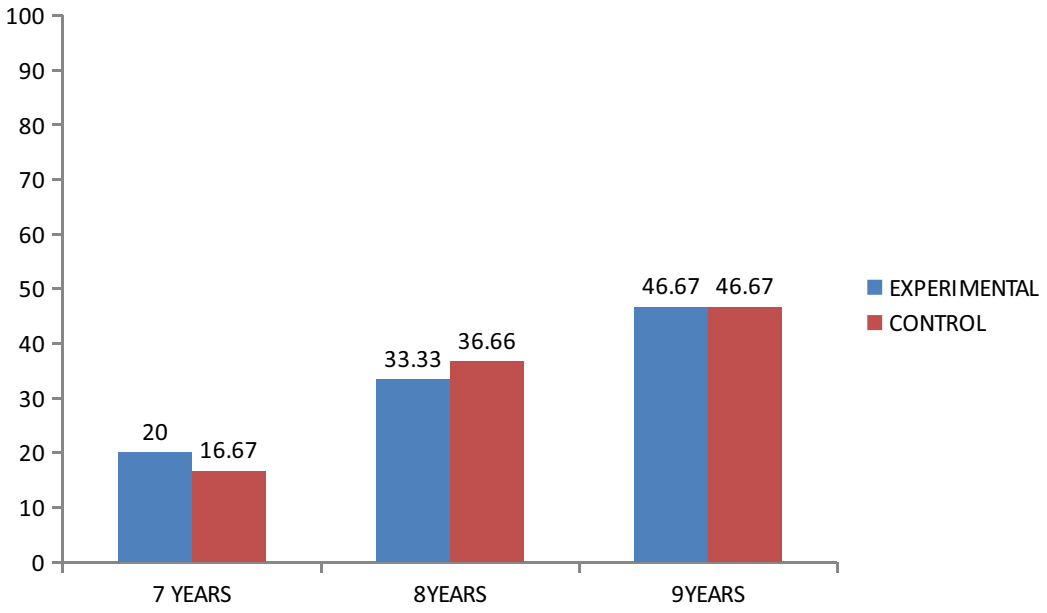


Fig. 1percentage distribution of samples according to their age

GENDER

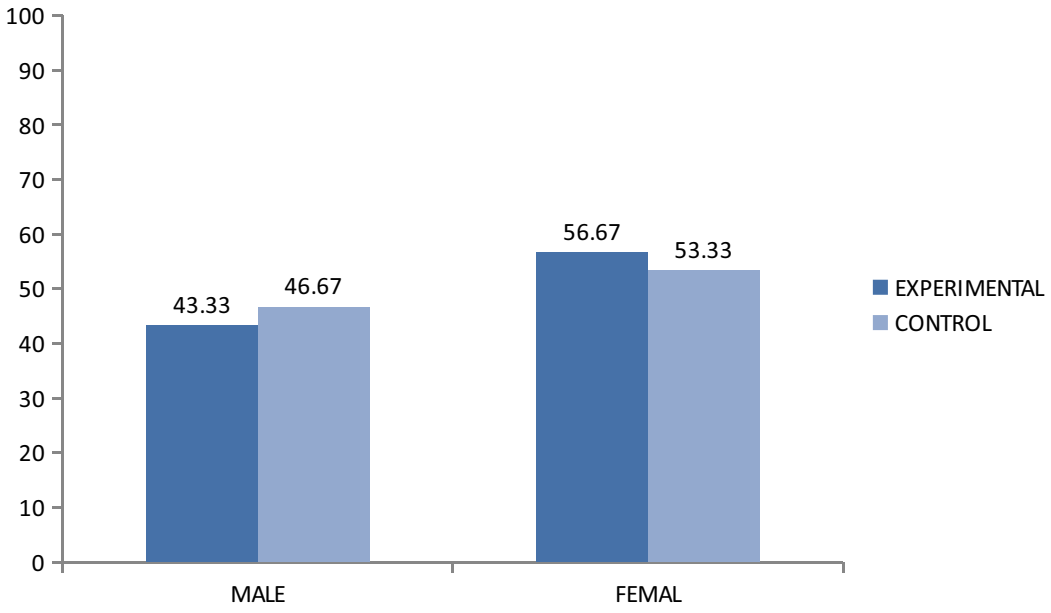


Fig.2.percentage distribution of samples according to their gender

BIRTH ORDER

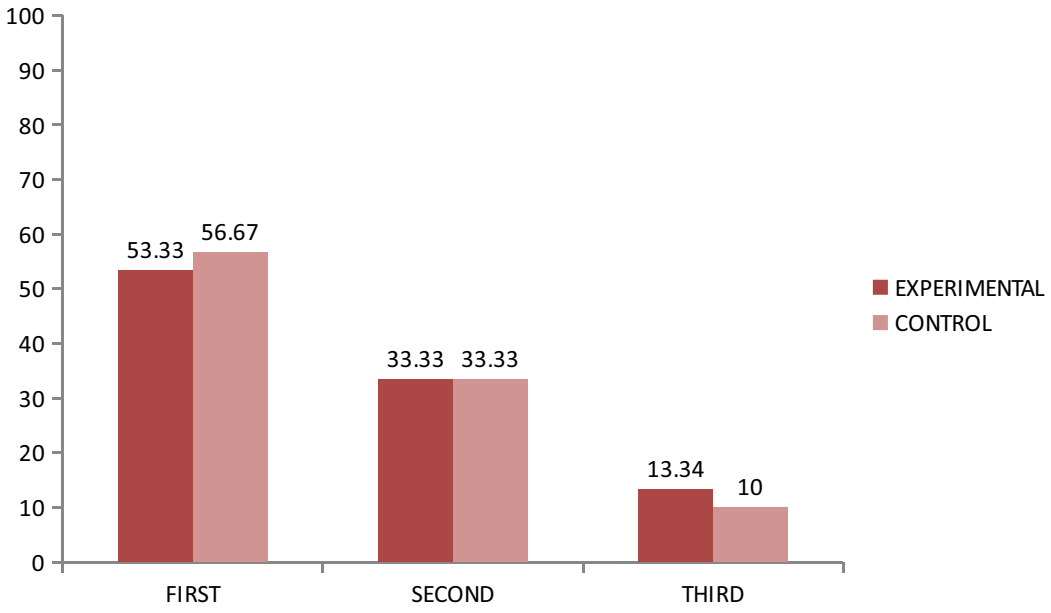


Fig.3.percentage distribution of samples according to their birth order

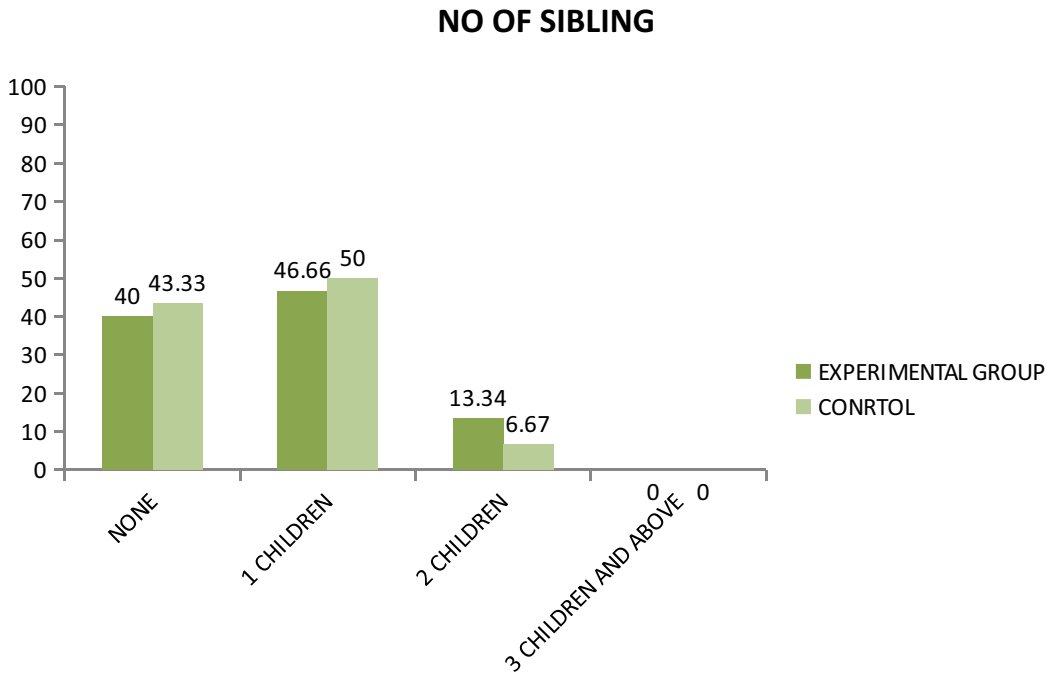


Fig.4.percentage distribution of samples according to their no of siblings

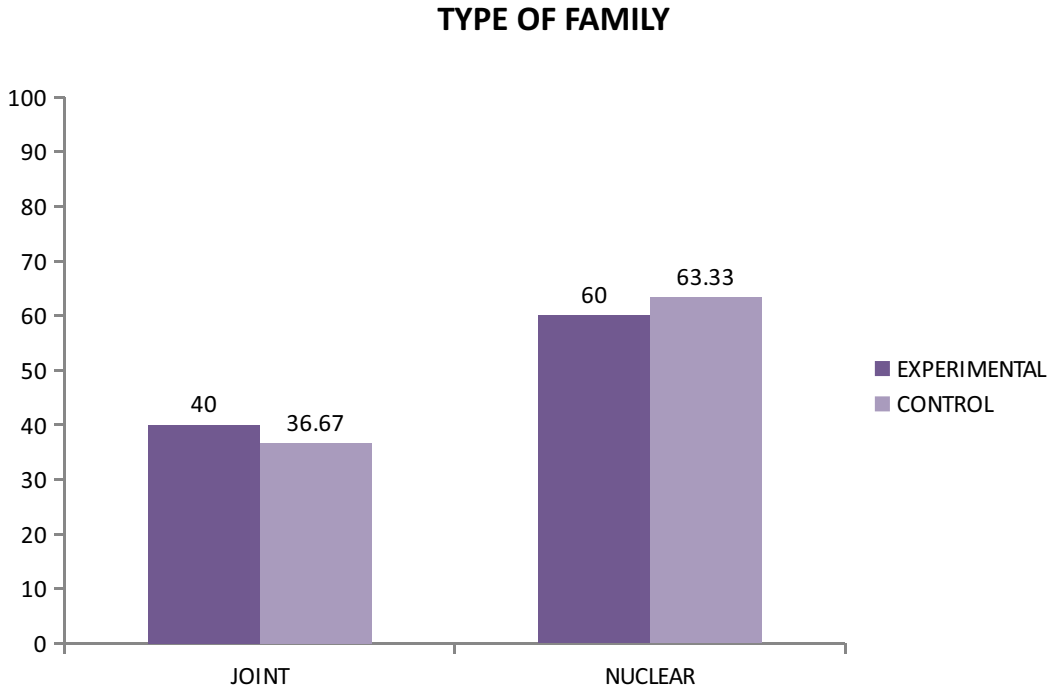


Fig.5percentage distribution of samples according to their type of family

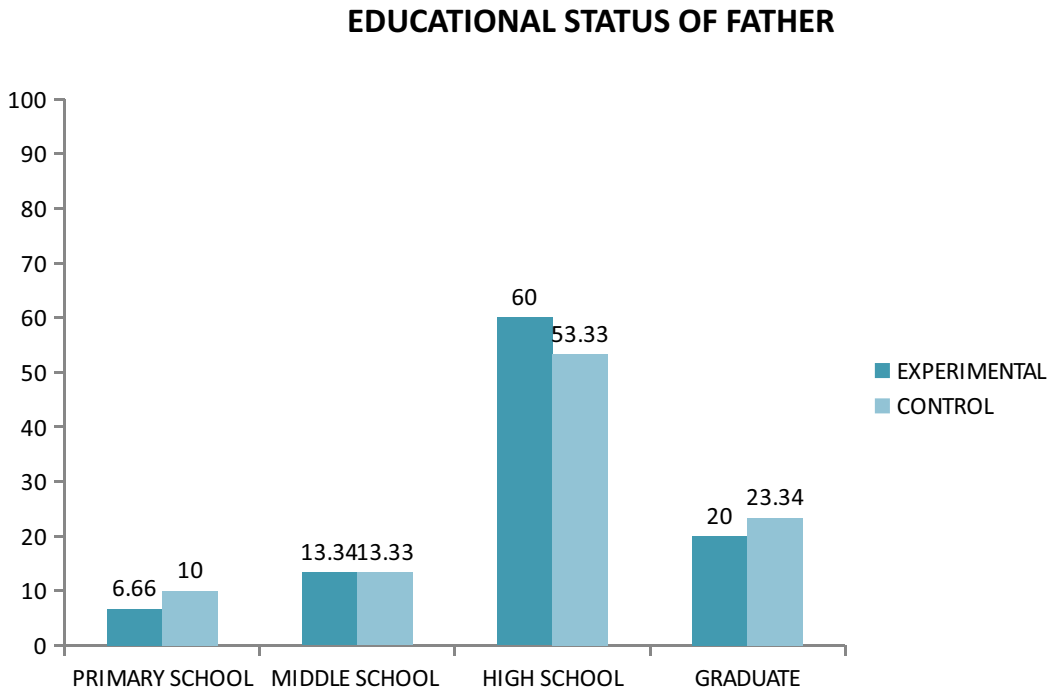


Fig.6percentage distribution of samples according to their educational status of father

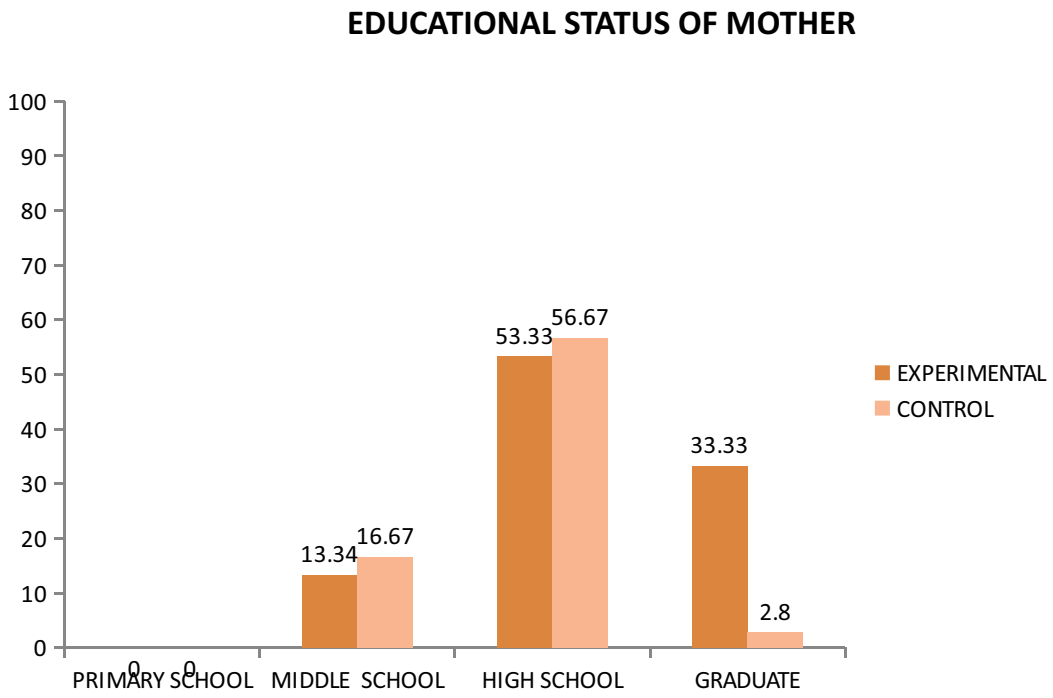


Fig.7percentage distribution of samples according to their educational status of mother

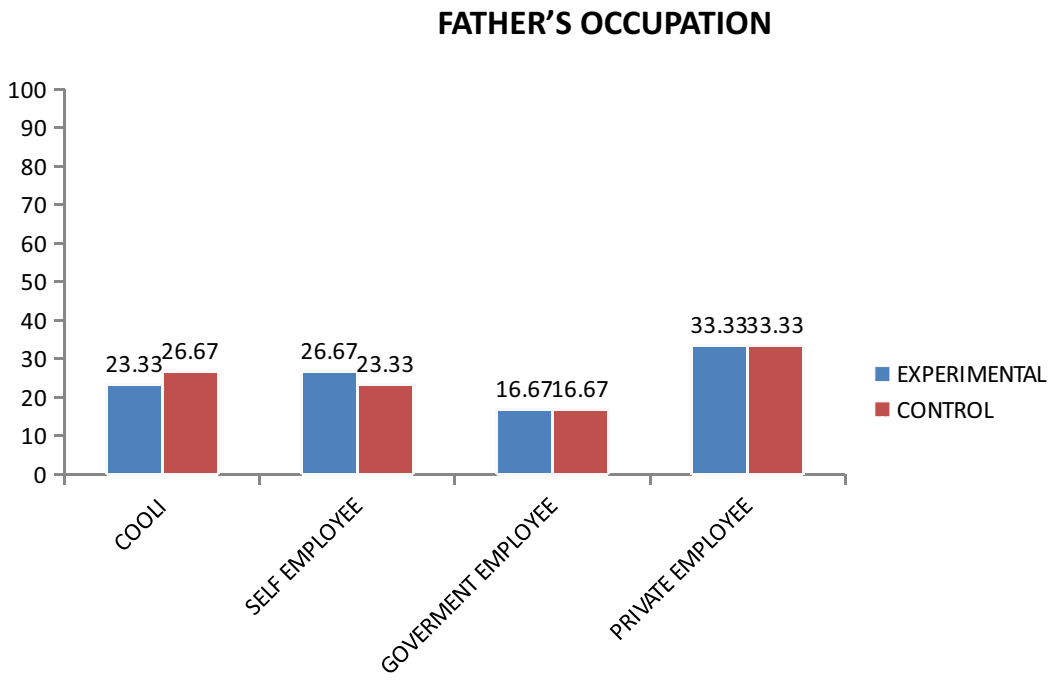


Fig.8percentage distribution of samples according to their father's occupation

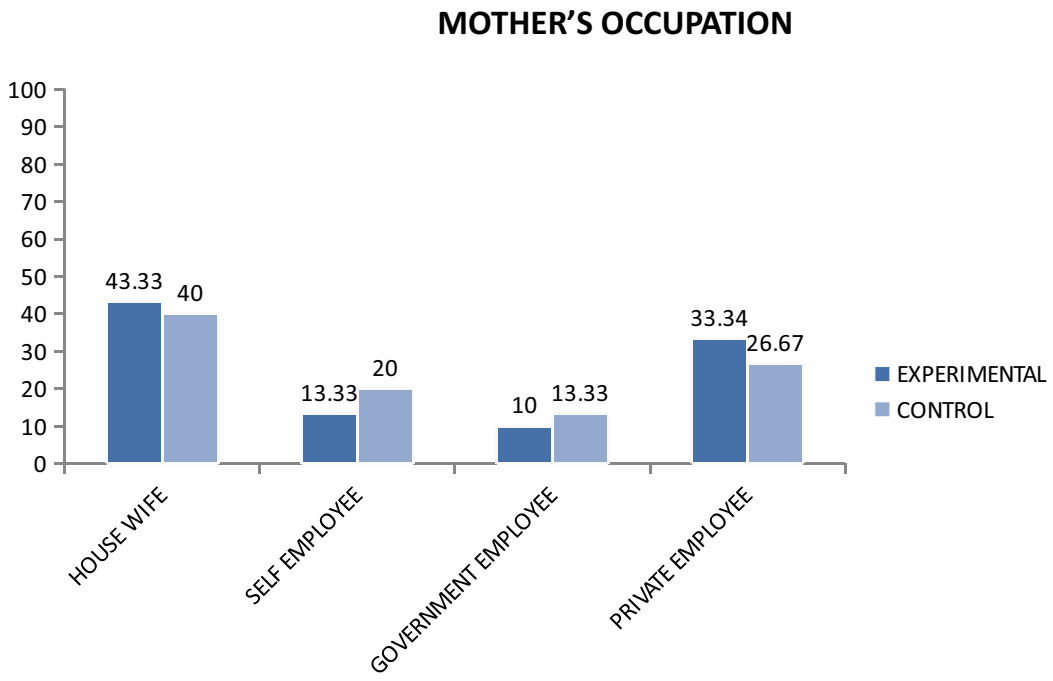


Fig. 9percentage distribution of samples according to their mother's occupation

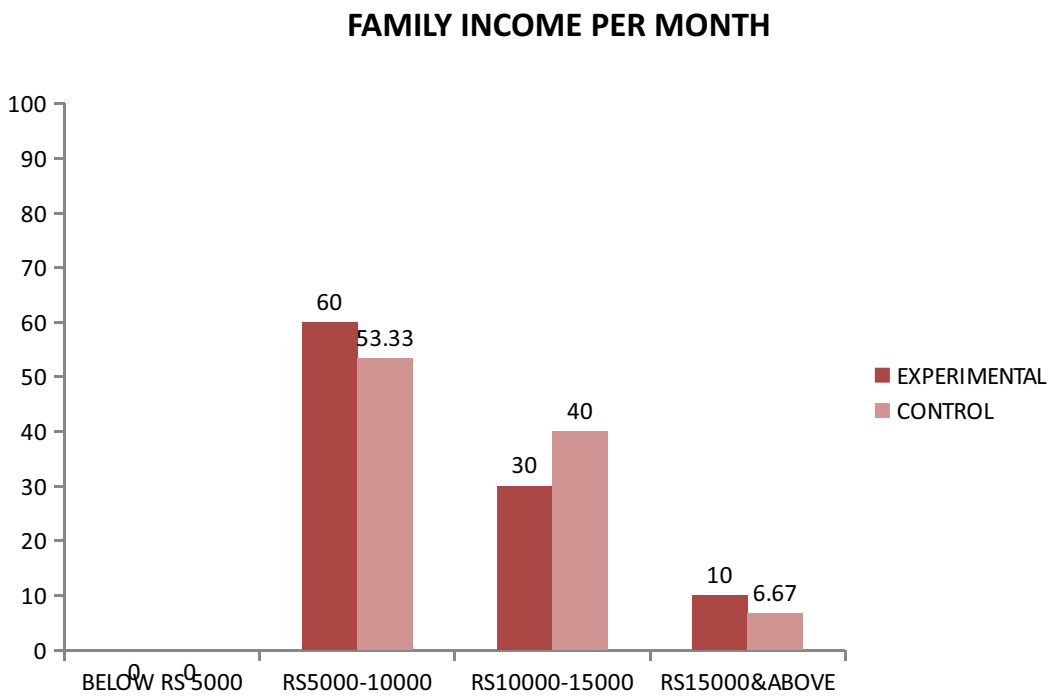


Fig.10percentage distribution of samples according to their family income per month

SECTION-B

I. DISTRIBUTION OF SAMPLE IN EXPERIMENTAL GROUP AND CONTROL GROUP AMONG SCHOOL AGE CHILDREN

Table - 2: Frequency and percentage distribution of School age children according to the level of concentration in Experimental group and Control group before intervention.

N=60

S. No	Level of Concentration	Pre test			
		Experimental group n=30		Control group n=30	
		F	%	f	%
1.	Low	16	53.33	15	50.00
2.	Medium	14	46.67	15	50.00
3.	High	0	0.00	0	0.00

During pretest, in Experimental group 16(53.33%) had Low level concentration, 14(46.67%) had Medium level concentration, 0(0%) had High level concentration. In Control group, 15 (50%) had Low level concentration, 15 (50%) had Medium level concentration, 0(0%) had High level concentration.

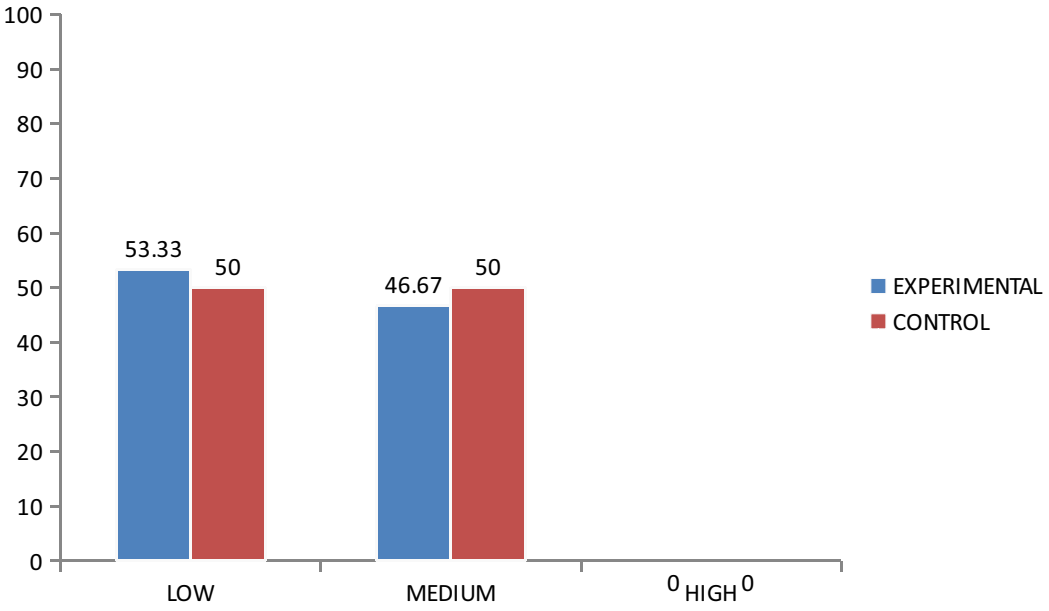


Fig-11: Frequency and percentage distribution of School age children according to the level of concentration in Experimental group and Control group before intervention.

II. DISTRIBUTION OF SAMPLE IN EXPERIMENTAL AND CONTROL GROUP AMONG SELECTED SCHOOL AGE CHILDREN AFTER INTERVENTION

Table-3: Frequency and percentage distribution of selected school age children Experimental group and Control group after intervention

N =60

S. No	Level of Concentration	Post test			
		Experimental group n=30		Control group n=30	
		f	%	F	%
1.	Low	0	0.00	16	53.33
2.	Medium	20	66.67	14	46.67
3.	High	10	33.33	0	0.00

During post test, in Experimental group, 0 (0.00%) had Low level concentration, 20 (66.67%) had Medium level concentration, 10 (33.33%) had High level concentration. In Control group, 16 (53.33%) had Low level concentration, 14 (46.67%) had Medium level concentration, 0 (0.00%) had High level concentration.

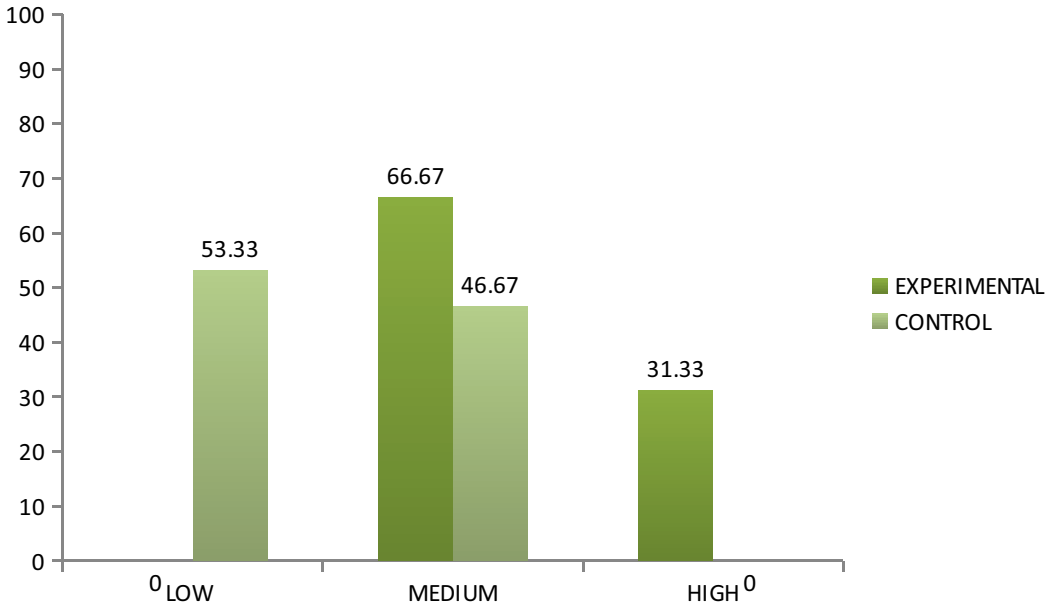


Fig-12: Frequency and percentage distribution of selected school age children in Experimental group and Control group after intervention

SECTION-C

I. COMPARISON OF PRE TEST AND POST TEST LEVEL OF SELECTED SCHOOL AGE CHILDREN IN EXPERIMENTAL GROUP AND CONTROL GROUP

Table-4: Mean, SD and paired 't' value on pre and post test level of selected school age children in Experimental group and Control group

N=60

S. No	Group	Mean	SD	Mean difference	df	Paired't' value
1.	Experimental group					
	Pre test	13.96	4.55	4.84	29	13.34*
	Post test	18.80	4.64			
2.	Control group					
	Pre test	12.66	3.84	0.30	29	0.902*
	Post test	12.96	3.63			

Table value t=2.04, * Significant at p > 0.05 level.

Table - 4 represents, the mean score of selected school age children in Experimental group was 13.96 in pre test and 18.80 in post test. The paired 't' value was 13.34***** which is significant at p >0.05. It shows that concentration enhancement therapy was effective in improving Concentration. Hence the research hypothesis (H_1) is accepted.

In Control group the mean score of selected school age children was 12.66 in pre test and 12.96 in post test. The paired't' value was 0.902***** which is significant at p >0.05.

II. COMPARISON OF POST TEST LEVEL OF SELECTED SCHOOL AGE CHILDREN IN EXPERIMENTAL GROUP AND CONTROL GROUP.

Table-5 Mean, SD and unpaired 't' value on level of Selected school age children in Experimental group and Control group after intervention.

N=60

S. No	Groups	Mean	SD	df	Unpaired 't' value
1.	Experimental	18.80	4.64	58	5.35*
2.	Control	12.96	3.63		

Table value t=1.691, * Significant at p > 0.05 level.

Table - 5 represents, the mean score of selected school age children in Experimental group was 18.80in post test and 12.96 in Control group post test. The estimated' value was 5.35* which is significant at p > 0.05. It shows that concentration enhancement therapy was effective in improving the level of Concentration. Hence the research hypothesis (H_2) is accepted.

SECTION-D

I. Association between the pre test level of selected school age children in Experimental group and Control group with their demographic variables

n=30

S. No	Demographic Variables	Experimental Group F	x^2	Df	T	Control Group F	x^2	Df	T
1	**Age**								
	a. 7yrs	6				5			
	b. 8yrs	10	2.83	2	5.99	11	2.26	2	5.99
	c. 9yrs	14				14			
2	**Gender**								
	• Male	13	5.12	1	3.84	14	4.82	1	3.84
	• Female	17				16			
3	**Birth order**								
	• First	16				17			
	• Second	10	3.49	2	5.99	10	1.25	2	5.99
	• Third	4				3			
4	**No of Siblings**								
	a) None	12				13			
	b) 1 child	14	1.52	3	7.82	15		3	7.82
	c) 2 children	4				2	1.63		
	d) 3 and above	0				0			
5	**Type of family**								
	• joint	12	1.43	1	3.84	11	0.14	1	3.84
	• nuclear	18				19			
6	**Educational status of father**					3			
	▪ Primary school	2				4			
	▪ Secondary school	4	3.2	3	7.82	16	3.61	3	7.82
	▪ High school	18				7			
	▪ Graduate	6							

7	**Educational status of mother**								
	a. Primary school	0				0			
	b. Secondary school	4	6.77	3	7.82	5	6.21	3	7.82
	c. High school	16				17			
	d. Graduate	10				8			
8	**Father's occupation**								
	a. cooli	7				8			
	b. self employe	8				7			
	c. government employee	5	2.38	3	7.82	5	2.61	3	7.82
	d. private employee	10				10			
9	**Mother's occupation**								
	a. House wife	13				12			
	b. self employee	4				6			
	c. government employee	3	3.36	3	7.82	4	3.32	3	7.82
	d. private employee	10				8			
10	**Family income per month**								
	a. below Rs 5,000	0				0			
	b. Rs 5,000-10,000	18	4.28	3	7.82	16	4.32	3	7.82
	c. Rs 10000-15000	9				12			
	d. Rs15000&above	3				2			

Table 6 shows that in experimental group, on considering the age, chi-square value was 2.83 and the table value at degrees of freedom two was 5.99. As per the gender, the chi-square was 5.12 and the table at degrees of freedom one was 3.84. birth order shows the chi-square value was 3.49, at degrees of freedom two, the table value was 5.99.the no siblings shows that chi-square value was 1.52.at degrees of freedom two, table value was 5.99. In type of family, chi-square value was 1.43 at the table value of 3.84 with degrees of freedom one educational status of father shows

chi-square value of 3.2 and table value of 7.82at degrees of freedom three. Educational status of mother shows chi-square value of 6.77 and table value of 7.82 at degrees of freedom three in father's occupation chi-square was 2.38and the table value was 7.82 at degrees of freedom 7.89, mother' occupation shows chi-square was 3.36 and table value was 7.82 at the degree of freedom 3.family income per month shows that chi-square value was4.28 and table value 5.99 at the degrees of freedom7.82.

Table 4.6 shows that in control group, on considering the age, chi-square value was 2.26 and the table value at degrees of freedom two was 5.99. As per the gender, the chi-square was 4.82 and the table at degrees of freedom one was 3.84 birth order shows the chi-square value was 1.25, at degrees of freedom two, the table value was 5.99. The no siblings shows that chi-square value was 1.63.at degrees of freedom two, table value was 5.99. In type of family, chi-square value was 0.14 at the table value of 3.84 with degrees of freedom one educational status of father shows chi-square value of 3.61 and table value of 7.82at degrees of freedom three. Educational status of mother shows chi-square value of 6.21 and table value of 7.82 at degrees of freedom three. in father's occupation chi-square was 2.61and the table value was 7.82 at degrees of freedom 3.32,mother' occupation shows chi-square was 3.36 and table value was 7.82 at the degree of freedom 3.family income per month shows that chi-square value was4.32 and table value 5.99 at the degrees of freedom7.82.

There is a significant association between the pre test level of concentration among selected school age children in experimental group and with their demographic variables such as age, gender, Birth order, number of siblings, type of family, educational status of father, educational status of mother, father occupation, mothers occupation, family income per month.

CHAPTER–V

DISCUSSION

This chapter deals with the discussion of the data analyzed based on the objective and hypothesis of the study. The problem stated was an experimental group a study to assess the effectiveness of concentration enchancement therapy in improving concentration among selected school age children in selected schools at Kanyakumari District. The discussion was based on the objectives of the study and the hypothesis mentioned in the study.

DISTRIBUTION OF SAMPLES ACCORDING TO THEIR DEMOGRAPHIC VARIABLES

In Experimental group out of 30 sample according to age 6(20%) were 7years of age, 10(33.3%) were 8years of age, 14(46.67%) were 9 years of age , and in control group 5(16.67%) were 7years of age, 11(36.66%) of them were to 8years of age, 14(46.67) were 9 years.

Distribution of sample according to the gender in the experimental group out of 30 sample 13(43.33%) were male, 17(56.67%) were female, and in control group14(46.67%) were male, 16(33.33%) were female.

Distribution of sample according to the birth order in the experimental group out of 30 sample 16 (55.33%) belonged to first child, 10(33.33%) of them belonged to second child, 4(13.34%) belonged to third child and in Control group17(56.67%) belonged to first child, 10(33.33%) of them belonged to second child, 3(10%) belonged to third child.

Distribution of sample according to the number of sibling in the experimental group out of 30 sample 12 (40%) were none, 14 (46.67%) were one children, 4(13.34%) were two children, 0 (0%) were three children and above, and in control

group 13 (43.33%) were none, 15 (50%) were one children 2 (6.67%) were three children and above.

Distribution of sample according to the type of family in the experimental group out of 30 sample 12 (40%) were joint family, 18 (60%) were nuclear family, and in control group 11 (36.67%) were joint family, 19 (63.33%family.

Distribution of sample according to the educational status of father in the experimental group out of 30 sample 2(6.66%) belonged to Primary school, 4 (13.34%) belonged to Middle school, 18 (60%) belonged to High school and 6(20%)belonged to graduate and in Control group 3(10%) belonged to Primary school, 4(13.33%)belonged to Middle school, 16(53.33%) belonged to High school and 7 (23.34%)belonged to graduate.

Distribution of sample according to the educational status of mother in the experimental group, out of 30 sample 0(0%) belonged to Primary school, 4(13.34%) belonged to Middle school, 16(53,33%) belonged to High school and 10(33.33%) belonged to graduate and in Control group 0(0%) belonged to Primary school, 5(16.67%) belonged to Middle school, 17(56,67%) belonged to High school and 8(26,66%) of them belonged to graduate.

Distribution of sample according to the Father's Occupation in the experimental group out of 30 sample 7 (23,33%) were Cooli, 8 (26,67%) were Self employee, 5(16.67%) were Government employee, 10 (33.33%) were Private employee and in control group 8 (26.67%) were Cooli, 7 (23.33%) were Self employee, 5 (16.67%) were Government employee, 10 (33.33%) were Private employee.

Distribution of sample according to the Mother's Occupation in the experimental group out of 30 sample 13 (43,33%) were House wife, 4 (13.33%) were

Self employee, 3(10.00%) were Government employee, 10 (33.34%) were Private employee and in control group 12 (40.00%) were House wife, 6 (20.00%) were Self employee, 4 (13.33%) were Government employee, 8 (26.67%) were Private employee.

Distribution of sample according to the Family income per month in the experimental group out of 30 sample 0 (0.00%) were Below Rs 5,000, 18 (60.00%) were Rs 5,000 – 10,000, 9 (30.00%) were Rs 10,000 – 15,000, 3 (10.00%) were Rs 15,000 & above and in control group 0 (0.00%) were Below Rs 5,000, 16 (53.33%) were Rs 5,000 – 10,000, 12 (40.00%) were Rs 10,000 -15,000, 2 (6.67%) were Rs 15,000 & above.

THE FIRST OBJECTIVE WAS TO ASSESS THE PRE AND POST-TEST LEVEL OF CONCENTRATION AMONG SELECTED SCHOOL AGE CHILDREN IN EXPERIMENTAL GROUP AND CONTROL GROUP.

During pretest, in Experimental group 16(53.33%) had Low level concentration, 14(46.67%) had Medium level concentration, 0(0%) had High level concentration. In Control group, 15 (50%) had Low level concentration, 15 (50%) had Medium level concentration, 0(0%) had High level concentration.

During post test, in Experimental group, 0 (0.00%) had Low level concentration, 20 (66.67%) had Medium level concentration, 10 (33.33%) had High level concentration. In Control group, 16 (53.33%) had Low level concentration, 14 (46.67%) had Medium level concentration, 0 (0.00%) had High level concentration.

Giju Thomas (2009) had conducted a study to assess the effectiveness of concentration ability in school children by intensive practice of integrated approach of concentration enhancement therapy through cancellation test at Selam, Tamilnadu.

Normal healthy 276 Tamil medium school children aged 6-12 years (14.25+1.09) were randomly assigned into three groups. Cancellation (color, letter & character) test was administered to children in all three groups on the first and ninth day of the residential programme. Comparison of pre and post values showed that there was significant improvement in cancellation test. The study concluded that the therapy were effective in improving concentration.

THE SECOND OBJECTIVE WAS TO DETERMINE THE EFFECTIVENESS OF CONCENTRATION ENHANCEMENT THERAPY BY COMPARING POST TEST LEVEL OF CONCENTRATION AMONG SELECTED SCHOOL AGE CHILDREN IN EXPERIMENTAL GROUP AND CONTROL GROUP.

The mean score of selected school age children in Experimental group was 18.80 in post test and 12.96 in Control group post test. The estimated' value was 5.35* which is significant at $p > 0.05$. It shows that concentration enhancement therapy was effective in improving the level of Concentration. Hence the research hypothesis (H_2) is accepted.

Bonzia (2009) was conducted a study to examine the ability of 60 elementary school students with concentration problems. Ranging in age from seven to eleven years, the students were matched according to age and gender and assigned equally for Concentration Enhancement therapy treatment groups' intervention and one control group. The first treatment group was called the integration-movement-only group. This group performed Concentration Enhancement therapy for ten minutes twice a day. The treatment was continued five days a week for six weeks. The other treatment group in this experiment received an additional 10-minute precursor session for cancellation task. When analyzed by demographic

characteristics only age group showed a statistically significant difference in concentration scores comparing before and after the intervention.

THE THIRD OBJECTIVE WAS TO FIND OUT ASSOCIATION BETWEEN PRE TEST LEVELS OF CONCENTRATION AMONG SELECTED SCHOOL AGE WITH SELECTED DEMOGRAPHIC VARIABLE IN EXPERIMENTAL GROUP AND CONTROL GROUP.

In experimental group, on considering the age, chi-square value was 2.83 and the table value at degrees of freedom two was 5.99. As per the gender, the chi-square was 5.12 and the table at degrees of freedom one was 3.84. Birth order shows the chi-square value was 3.49, at degrees of freedom two, the table value was 5.99. The no siblings shows that chi-square value was 1.52.at degrees of freedom two, table value was 5.99. In type of family, chi-square value was 1.43 at the table value of 3.84 with degrees of freedom one educational status of father shows chi-square value of 3.2 and table value of 7.82at degrees of freedom three. Educational status of mother shows chi-square value of 6.77 and table value of 7.82 at degrees of freedom three. in father's occupation chi-square was 2.38and the table value was 7.82 at degrees of freedom 7.89,mother' occupation shows chi-square was 3.36 and table value was 7.82 at the degree of freedom 3.family income per month shows that chi-square value was4.28 and table value 5.99 at the degrees of freedom7.82.

In control group, on considering the age, chi-square value was 2.26 and the table value at degrees of freedom two was 5.99. As per the gender, the chi-square was 4.82 and the table at degrees of freedom one was 3.84. Birth order shows the chi-square value was 1.25, at degrees of freedom two, the table value was 5.99. The no of siblings shows that chi-square value was 1.63.at degrees of freedom two, table value

was 5.99. In type of family, chi-square value was 0.14 at the table value of 3.84 with degrees of freedom one educational status of father shows chi-square value of 3.61 and table value of 7.82at degrees of freedom three. Educational status of mother shows chi-square value of 6.21 and table value of 7.82 at degrees of freedom three. in father's occupation chi-square was 2.61and the table value was 7.82 at degrees of freedom 3.32,mother' occupation shows chi-square was 3.36 and table value was 7.82 at the degree of freedom 3.family income per month shows that chi-square value was4.32 and table value 5.99 at the degrees of freedom7.82

There is a significant association between the pre test level of concentration among selected school age children in experimental group and control group with their demographic variables such as age, gender, Birth order, number of siblings, type of family, educational status of father, educational status of mother, father occupation, mothers occupation, family income per month.

CHAPTER VI

SUMMARY, CONCLUSION,

NURSING IMPLICATION AND RECOMMENDATIONS

This chapter deals with the summary of the study, conclusion drawn, nursing implications, limitations and recommendations of the study.

Summary

Quantitative evaluative approach with true expertimental pre test post test control research design was used to determine the effectiveness of concentration enhancement therapy in improving concentration among selected school age children. The conceptual framework was based on General System Theory of Von Ludwig Bertalanffy (modified) (1968) as explained by Newby (1996).The tool used in the study consisted of two parts. Part one was demographic variables and the part two James M Swanson. Random sampling technique was used to collect the sample and the data was collected from the study participant in expertimental group and control group. The data were collected and analyzed using descriptive and inferential statistics. The level of significance was assessed by $p > 0.05$ to test the hypotheses.

Findings

During pretest, in Experimental group 16(53.33%) had Low level concentration, 14(46.67%) had Medium level concentration, 0(0%) had High level concentration. In Control group, 15 (50%) had Low level concentration, 15 (50%) had Medium level concentration, 0(0%) had High level concentration.

During post test, in Experimental group, 0 (0.00%) had Low level concentration, 20 (66.67%) had Medium level concentration, 10 (33.33%) had High level concentration. In Control group, 16 (53.33%) had Low level concentration, 14 (46.67%) had Medium level concentration, 0 (0.00%) had High level concentration.

The mean score of selected school age children in Experimental group was 13.96 in pre test and 18.80 in post test. The paired 't' value was 13.34* which is significant at p >0.05. In Control group the mean score of selected school age children was 12.66 in pre test and 12.96 in post test. The paired 't' value was 0.902* which is significant at p >0.05.It shows that concentration enhancement therapy was effective in improving Concentration. Hence the research hypothesis (H_1) is accepted.

Conclusion

From the result of the study, it was concluded that providing concentration enhancement therapy to the school age children was very effective in improving the level of concentration which may further enhance them in improving their academic performance. Thus it may be considered as mandatory during their academic endeavor.

Implications

The researcher has derived the following implications from the study results which are of vital concern to the field of nursing service, nursing administration, nursing education and nursing research.

Implications for Nursing Practice

1. Nurses should have thorough knowledge regarding on identifying the level of concentration among school age children.
2. Nurses can encourage the hospitalized school age children to do concentration enhancement therapy in Pediatric hospital settings.
3. Nurses can encourage the parents to motivate their children to practice concentration enhancement therapy in household routine.

4. Nurses can educate the school teachers about different type of concentration enhancement therapy to the students in schools.

Implications for Nursing Education

1. The nurse educators need to be ready with adequate knowledge regarding different types of therapies in improving the level of concentration.
2. Nursing students can receive adequate practice in using concentration enhancement therapy on improving the academic performance of school age children.
3. Conduct workshops and conferences for introducing different types of concentration enhancement therapy in our nursing curriculum.
4. Nurse educator can conduct in-service education on uses of concentration enhancement therapy to their nursing students.

Implications for Nursing Administration

1. Nurses can assist in implementing public health awareness campaigns aimed at promoting concentration by using concentration enhancement therapy to the school age children.
2. Nurse administrators can conduct training programs on concentration enhancement therapy for staff nurses, nursing students and social workers.
3. Nurses should conduct continuing nursing education programme regarding the benefits of concentration enhancement therapy.
4. The nurse administrator coordinates her activity along with the curative and rehabilitative aspects of care among school age children by motivating them to the practice of concentration enhancement therapy.

Implications for nursing research

1. Nurse can conduct a research on creating different types of ratting scale for assessing the level of concentration among different age group children.

2. Encourage further research to be conducted to find out the effectiveness of concentration enhancement therapy among school age children on other conditions.
3. Disseminate the findings of the research through conferences, workshops, seminars and publishing in nursing journals.

Recommendations

The following studies can be undertaken to strengthen concentration enhancement therapy as a good remedy for concentration among school age children.

- ♣ A study can be carried out to assess the academic performance and learning disabilities among school age children.
- ♣ A study can be conducted with large sample size to generalize the results of the study.
- ♣ A study can be conducted to different population of school children.

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GLOBAL COLLEGE OF NURSING

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Affliated to Tamil Nadu Dr. M.G.R. Medical University
Edaivilagam, Nattalam, Kanyakumari District.
Off: S.G. Multi Speciality Hospital, Old Theatre Jn, Pammam, Marthandam - 629 165, K.K. Dist., Tamil Nadu. Mob : 9443606955, 9944110448.

To

The Head Master,
St.Bernadettes Higher Secondary School,
Mangalakuntu,
Mangalakuntu(P.O)
K.K.Dist.

Sir,

Sub: Permission seeking letter for the conduct of research – reg.

This is to request you to kindly permit Mrs. B. Sutherlin Suba, II year M.Sc. (N), Global College of nursing to conduct her study.

STATEMENT OF THE STUDY:

A STUDY TO ASSESS THE EFFECTIVENESS OF CONCENTRATION ENHANCEMENT THERAPY IN IMPROVING CONCENTRATION AMONG SELECTED SCHOOL AGE CHILDREN IN SELECTED SCHOOL AT KANYAKUMARI DISTRICT

So, kindly consider this letter and do the needful.

Thanking you,

Yours,
Principal
GLOBAL COLLEGE OF NURSING
Edavilagam, Nattalam,
Kanyakumari District - 629 165

Permitted
5.10.2015
HEADMASTER
HIGHER SECONDARY SCHOOL

LETTER SEEKING EXPERTS OPINION FOR VALIDITY OF TOOL

Form

Sutherlin Suba. B

II year MSC Nursing

Global College of nursing

Nattalam

To

Respected Sir/ Madam

I am doing II year MSC nursing in Global College of Nursing, Nattalam, As a partial fulfillment of course, I have choosen a topic of my interest **"A study to assess the effectiveness of concentration enhancement therapy in improving concentration among selected school age children at Kanyakumari district"**. I have prepared demographic data and standardized tool. I here kindly request you to evaluate the tool based on the evaluation criteria. Your opinion and suggestions will help me to the successful completion of my study.

Thanking You,

Your's faithfully,

Sutherlin Suba.B

APPENDIX: C

EVALUATION CRITERIA CHECK LIST FOR VALIDATION

Introduction

The expert is requested to go through the following criteria for evaluation. Three columns are given for responses and a coloumn for remarks. Kindly place tick mark in the appropriate column and give remarks.

Interpretation of column

Column I : Meets the criteria

Column II : Partially meet the criteria

Column III : Does not meet the criteria

Serial No	Criteria	1	2	3	Remarks
1	Scoring - Adequacy - Clarity - Simplicity				
2	Content - Logical sequence - Adequacy - Relevance				
3	Language - Appropriate - Clarity - Simplicity				
4	Practicability - It is easy to score - Does it precisely - Utility				

Signature: Any other Suggestion

Name:

Designation :

Address :

APPENDIX: D

LIST OF EXPERTS FOR TOOL VALIDATION

1. **Mrs. Violin Sheeba, M.Sc., (N)**
   Principal,
   Thasaiah College of Nursing,
   Marthandam.

2. **Mrs. Jameela S, M.Sc., (N)**
   Reader,
   White Memorial College of Nursing,
   Attoor.

3. **Mrs. Malchijah. F.**
   Professor,
   Christian College of Nursing,
   Neyoor.

4. **Mrs. D. Premalatha**
   Asst. Professor,
   Christian College of Nursing
   Neyyoor.

5. **Mrs. Arul Sili Ninchal. A M.Sc., (N)**
   Lecturer,
   CSI College of Nursing,
   Marthandam.

APPENDIX: E
DEMOGRAPHIC VARIABLES

SECTION A

1. Age
   a)7 years
   b)8 years
   c)9years
2. Gender
   a)Male
   b)Female
3. Birth order
   a) First
   b) Second
   c) Third
4. No. of sibling
   a)None
   b)1 child
   c)2 children
   d)3 children and above
5. Type of family
   a)joint
   b)nuclear
6. Educational status of father
   a) Primary school
   b) Middle school
   c) High school
   d) Graduate
7. Educational status of mother
   a) Primary school
   b) Middle school
   c) High school
   d) Graduate
8. Father's Occupation
   a) Cooli
   b) Self Employee
   c) Government Employee
   d) Private Employee
9. Mother's Occupation

a) housewife
b) Self Employee
c) Government Employee
d) Private Employee

10. Family Income per month
a) Below Rs 5,000
b) Rs 5000- 10,000
c) Rs 10000 - 15,000
d) Rs15000&above

SECTION-B

CONCENTRATION ASSESSMENT SCALE

Student Name: **Class:**

Completed by: **Completed on:**

Introduction:

Please consider the last month only in filling out the checklist check the appropriate box for each item, not at all just a little, pretty much or very much, which describes best your assessment of Student please complete all the items.

S. No	Observation	Degree of activity			
		Not at all (0)	Just a little (1)	Quite A bit (2)	Very much (3)
1.	Makes careless mistakes				
2.	Blames other for his/her mistakes				
3.	Doesn't listen				
4.	Fails to finish work				
5.	Disorganized				

6.	Sleeps during class hours				
7.	Loses things				
8.	Distractible				
9.	Forgetful in daily activities				
10.	Jump from one work to another work without completeting				

The total score was 30
The maximum score was 30
The minimum score was 0

Level of concentration	**Score**
Low concentration	Less than 13
Medium concentration	14-22
High concentration	More than 23

APPENDIX-F

STEPS OF INTERVENTION

Steps :

- The researcher established rapport with the school children.
- The participants in the experimental group were made to stand in 5 members at 3 rows with 2 feet distance.
- The investigator demonstrates the concentration enhancement therapy to the experimental group. The experimental group practice concentration enhancement therapy for 20 minutes every day for the period of 4 weeks in the presence of investigator.
- The researcher told the selected school age children to do physical exercise for 20 minutes
- The researcher guided the selected school age children to do letter cancellation task and colour cancellation task for10 minute.
- Finally the researcher told the school age children to sit straight and get relaxation to close the session.
- Totally each session was conducted for 20 minutes.

1. Physical exercise -10minutes
2. Letter cancellation -5minutes
3. Color cancellation -5minutes

1. PHYSICAL EXERCISE

Step1: Bending exercise

Stand straight with your legs together

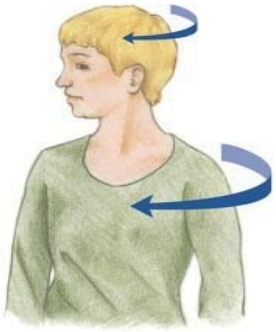
- Raise your hands above your head

- Bow forwards without flexing your knees touch the tip of the toes with your hands.

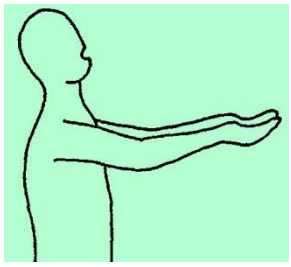
- Repeat all this for 5 minutes

Step2: Extension exercise

- Stand straight with your legs together



- Extend to your head towards side.



- Extend your hands towards your shoulder level

- Come back to normal position repeat all this for 5 minutes

2. Letter cancellation

Each sample will be provided with two sheets, first sheet consists of only capital alphabets where second sheet consists of both capital and small alphabets were printed in a random manner. This activity comprised of three tasks .First task consist of canceling only the capital letters A, D and Q within one minute. Second task involved cancelling the small letters a after a double space within 45 seconds .Third task comprised of canceling capital letter A as well as the small letters a after each double space within 30 seconds. Overall time frame were been reduce from one minute, 45seconds and 30seconds respectively.

Task I

b	x	L	V	a	c	E	A	b	o	W	A	a	p
a	s	A	F	u	m	Y	N	a	b	G	H	r	b
n	b	N	A	a	m	A	B	S	r	M	O	p	o
t	e	C	B	b	a	N	P	U	f	A	L	s	n
a	e	R	A	c	n	R	T	b	a	U	P	s	k
u	n	M	N	a	f	S	R	h	s	B	U	b	a
j	a	L	P	h	b	U	A	v	x	E	A	s	p
b	n	M	A	z	a	M	B	e	t	E	B	u	a
j	s	N	G	b	d	I	A	k	a	A	E	n	l
l	u	O	R	a	v	A	I	o	l	T	M	b	i
a	v	N	G	c	m	N	T	b	p	H	A	g	h
r	i	A	E	d	a	T	S	a	e	A	N	t	b
n	b	M	A	w	u	A	U	r	y	D	D	a	o
b	a	N	G	q	b	N	J	v	a	S	A	b	m
m	o	O	H	b	a	I	A	x	e	U	O	n	b
b	e	A	P	a	s	T	T	w	q	V	I	j	r
a	r	P	L	z	u	A	H	s	b	A	P	b	a

Activity: Child was asked to cancel the capital letters A, D and Q within 1minutes.

Task II

NdaTn JKa bjnVR dajbDnK JcFmKlkg uJSEUIJ QgjdaiOP bhR FV lbC YTYIfj fjsFS hnGYak bBfUD GYUge yrgeFDgh asFDgv fS MAVFfg fdFgh aFDSAT YhffDSh dSsFKKbda RGsavvSF fvGssA jawdg uHga uUvgg VGjk nbgIFT JHGnfy gbCkjgF RabBd RYTjj udt FDJagGJ GU kiay GTDY SliDglja FRbeg kYInN ahuDe UkjgFT DkhfTY AdjVDSJ nfahfEG FDSjhyj fcDEDua uiBBFsa ryghgFS TGDcza sebolSnb DTacAY InnNsaI WYgs Udfs AEb jTCD afsstDW ghfA Iad YimDE UJDfdd dgGHFD HfssF hdfjJ hGfgd HFfvg iAUI fjkL Knv OTsYl.

Activity: Child was asked to cancel the small letter

a after double spacing within 45seconds

Task III

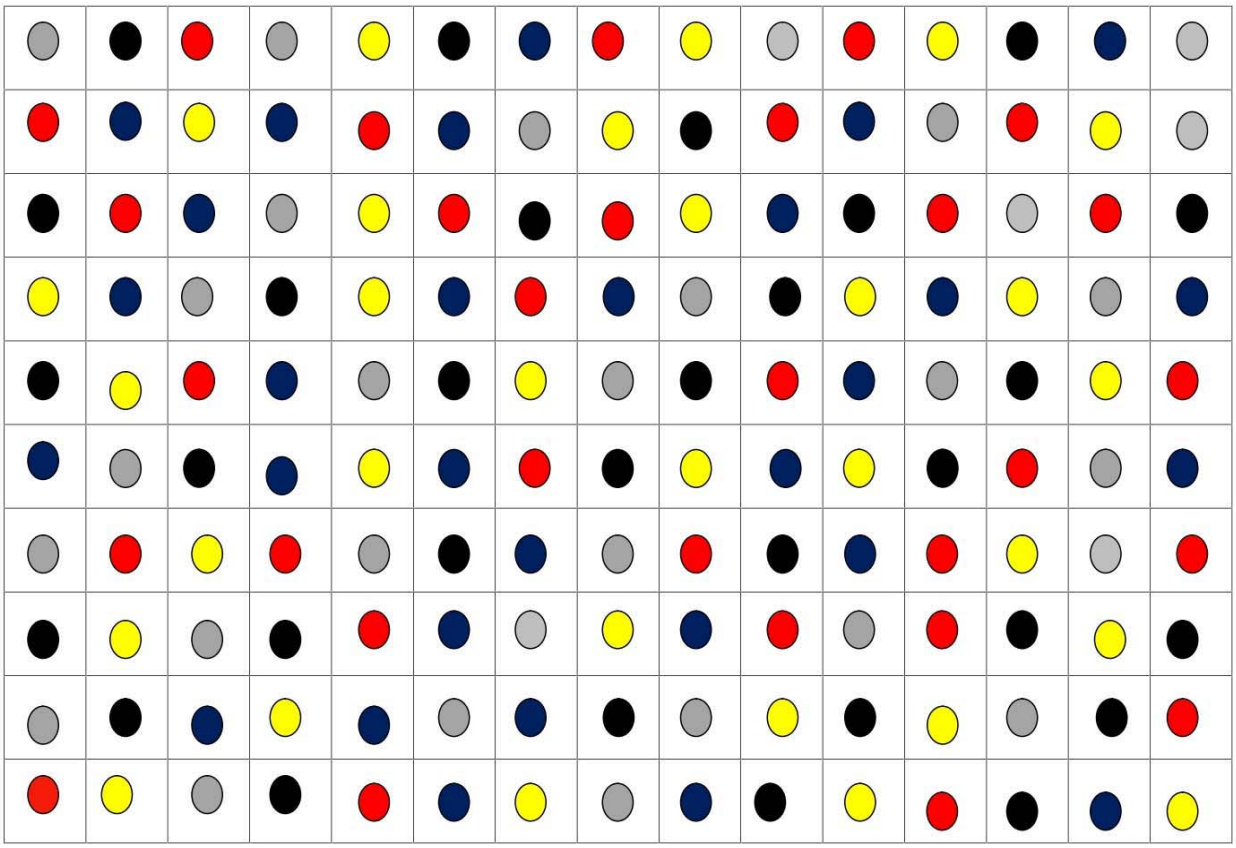
NdaTn JKa bjn VR dajbDnK JcFmKlkg uJSEUIJ QgjdaiOP bhR FV lbC YTYIfj fjsFS hnGYak bBfUD GYUge yrgeFDgh asFDgv fS MAVFfg fdFgh aFDSAT YhffDSh dSsFKKbda RGsavvSF fvGssA jawdg uHga uUvgg VGjk nbgIFT JHGnfy gbCkjgF RabBd RYTjj udt FDJagGJ GU kiay GTDY SliDglja FRbeg kYInN ahuDe UkjgFT DkhfTY AdjVDSJ nfahfEG FDSjhyj fcDEDua uiBBFsa ryghgFS TGDcza sebolSnb DTacAY InnNsaI WYgs Udfs AEb jTCD afsstDW ghfA Iad YimDE UJDfdd dgGHFD HfssF hdfjJ hGfgd HFfvg iAUI fjkL Knv OTsYl.

Activity: Child was asked to cancel the capital letter A as well as small letters after double spacing within 30 seconds.

3. Colour cancellation

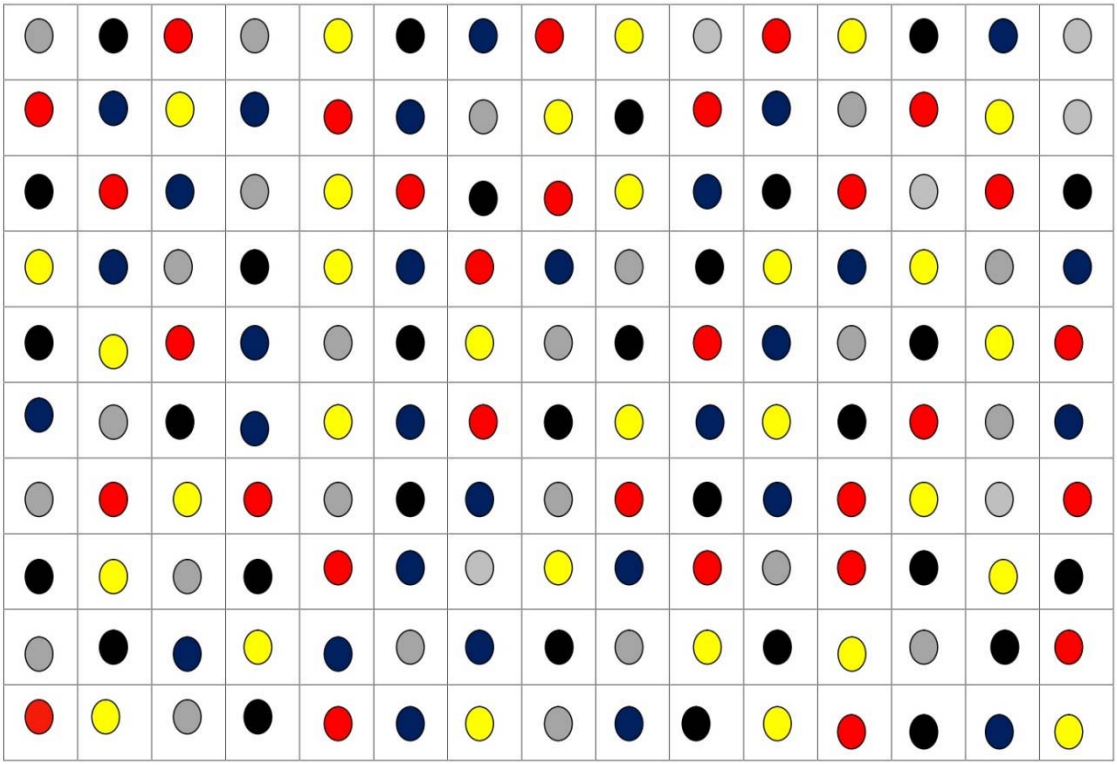
A sheet consists of five colors they are red, blue, yellow, black and gray. Each color consists of 30 dots. Total dots present in the sheet are 150 colored. The dots were arranged equivalent from each other in a random order .There are two parts of the test –simple colour canceling and complex color cancellation. The student was first asked to name or match the colored dots in order to test his or her colour vision. In the simple task the subject was instructed to cross out all the black dots with pencil provided as fast as they can. A time limit of 30 seconds was maintained. For the complex task was instructed to cross out all the yellow and red dots within the time limit of 30 seconds. The number of correct dots cancelled and number of missing dots was recorded.

Task I



Activity: Child was asked to cancel the black dots within 30 seconds.

Task II



Activity: Child was asked to cancel the yellow and red dots within 30 seconds.